
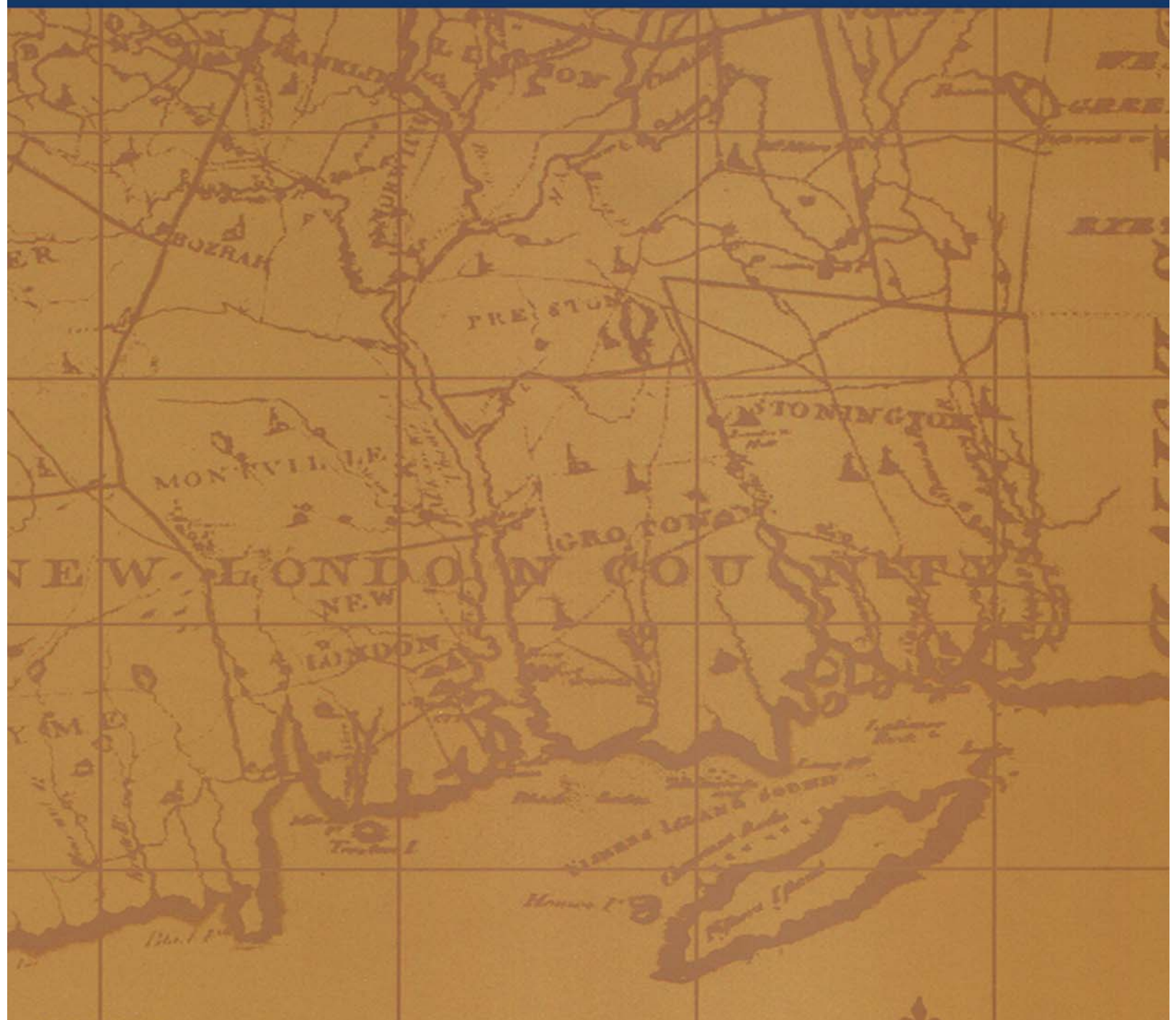




SouthEastern Connecticut Enterprise Region
Southeastern Connecticut Council of Governments

SCCOG
Southeastern Connecticut
Council of Governments



Comprehensive Economic Development Strategy for Southeastern Connecticut 2004

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EXECUTIVE SUMMARY

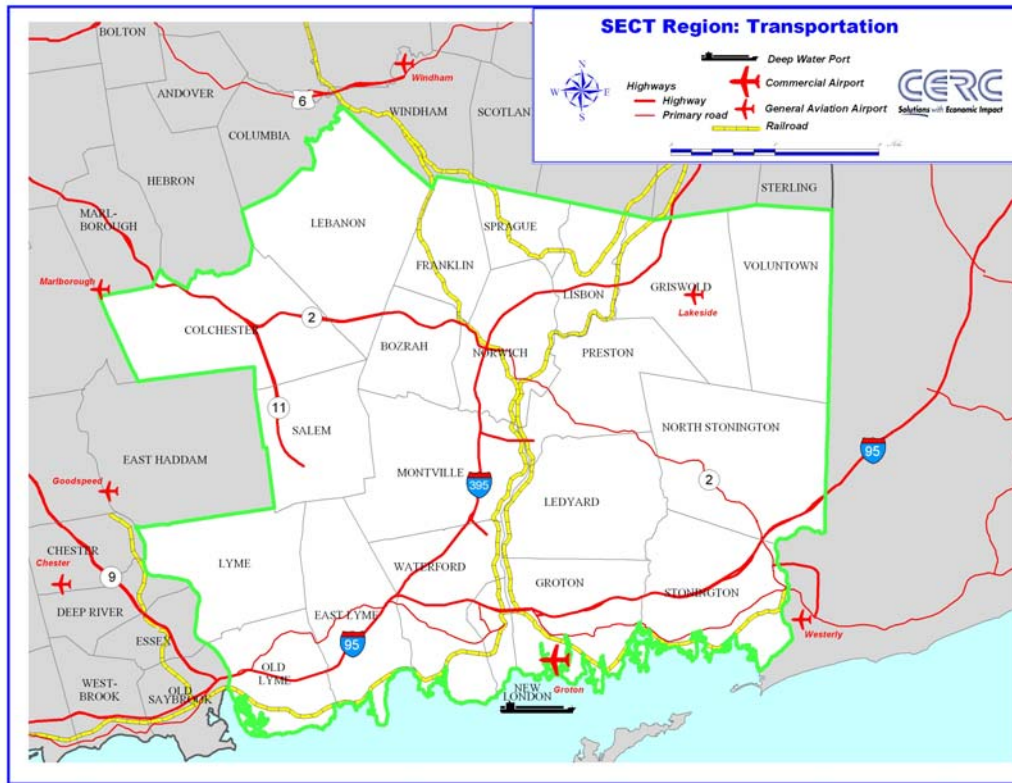
The southeastern Connecticut Region (SECT) has undergone a radical restructuring of its economy over the past decade. SECT is home to both the Naval Submarine Base New London in Groton, the Atlantic homeport for attack nuclear submarines, and Electric Boat, which designs, manufactures, and repairs submarines for the U.S. Navy. In 1990, these two facilities, along with many contractors and subcontractors, provided about 37,000 high paying jobs for residents of the region. By the year 2000, 17,000 defense-industry positions had been eliminated. While this could have been an economic disaster, what could not have been forecast in the early 1990s was the explosive growth in what has become the region's new economic strength, the tourism and entertainment industry cluster. This growth was driven primarily by the development and eventual expansion of two major casinos — Foxwoods and Mohegan Sun. By 2004, with over 20,000 jobs at the two casinos, the region has become almost as dependent upon these two entities as it was in the 1990s on the Submarine Base and Electric Boat.

Responding to the looming defense downsizing in the 1990s, a strategic action plan for the region's future was developed, leading to the establishment of the Southeastern Connecticut Enterprise Region (seCTer) with the mission of strengthening and diversifying the region's economy. After a decade spent on implementation, seCTer, along with the Southeastern Connecticut Council of Governments (SCCOG), decided to update the strategic plan in 2003, and embarked upon a strategic planning process with the goal of creating a regional Comprehensive Economic Development Strategy (CEDS) for the U.S. Economic Development Administration. The intent of this process is to create a common understanding of regional economic development and to bring all of the region's stakeholders together around a common set of priorities and a common vision for the future. This report is the culmination of that process.

Definition of the Region

The southeastern Connecticut region includes all of the municipalities within New London County, and encompasses 21 towns. Based on the 2000 Decennial Census, the county spans 666 square miles and is home to 259,088 residents, equating to a population density ratio of 389.1 persons per square mile, compared to the state ratio of 702.9.

***Figure 1. Map of SECT Municipalities**



Economic Trends

- ***After a long period of slow growth, SECT's population has grown more rapidly over the past few years.*** In each decade since 1970, the population growth in the U.S. has been from 3 to 11 percent higher than SECT's. Estimates of population growth since the 2000 Census suggest that the populations of both SECT and Connecticut have been growing more rapidly. In fact, the estimated growth for the towns in SECT between 2000 and 2003 (5,200) already exceeds the growth observed in that region throughout the 1990s (4,130).
- ***The region has experienced relatively rapid job growth over the past decade.*** As a result of defense downsizing, coupled with a real estate/banking collapse and cyclical shock, employment in New London County decreased during the early 1990s, although not as sharply as the state. Since 1992, compared to employment growth in Connecticut, New London County's growth has been quite brisk due to the advent of the casinos. Job growth has been particularly strong since the end of the last recession.
- ***Economic disparities are growing within the region.*** On almost every measure, there are significant differences between the economic performance of the suburban and rural communities in SECT and its urban centers. In the suburban and rural communities, job growth and incomes are higher, poverty rates and unemployment rates are much lower, and population is growing. In contrast, the population in poverty remains concentrated in Norwich and New London, both of which have double-digit poverty rates, basically

unchanged over a 10-year period. These urban communities also have higher unemployment rates, have seen population declines, and have had limited job growth.

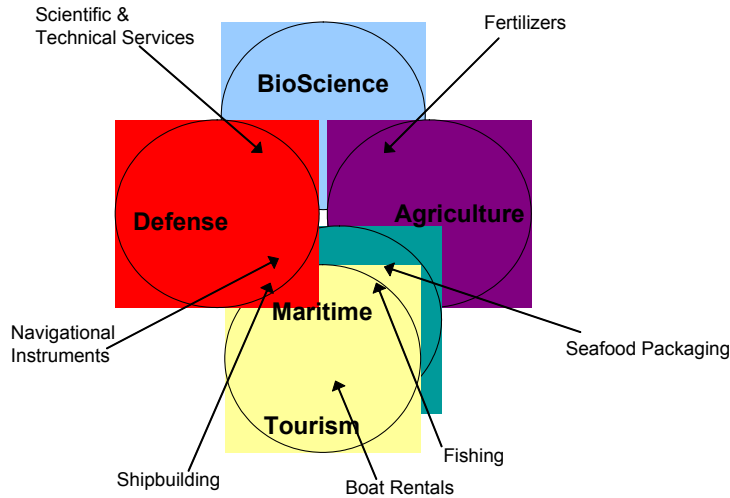
- ***The population of the region has become more ethnically diverse.*** Overall, the population in the region is not very diverse. Only one town, New London, is more diverse than either the U.S. or Connecticut. There has, however, been a significant change in the overall racial and ethnic composition of the population. The Hispanic population of the SECT region grew by 57 percent during the 1990s. In addition, since the 2000 Census was taken, there has been a large migration of minorities into the region, most notably growth in the Asian population. Data from regional school districts provide evidence of an influx of minorities and non-English speaking students in many school districts since 2000.
- ***The region is increasingly supplementing its labor pool by importing workers from outside the region.*** Labor force growth in New London County has lagged employment growth, leading to an influx of commuters from outside the region to fill jobs. For example, more than 9,000 Rhode Island residents and 2,000 residents from Hartford County commuted to jobs in the region in 2000.
- ***The region has seen an unusual shift in its economic structure over the past decade.*** SECT was one of the most defense-dependent regions in the U.S. with about 25 percent of its economic base tied to defense in 1992. While defense remains a critical industry in the region, the establishment of the Foxwoods and Mohegan Sun casinos, starting in 1992, has led to well over 20,000 new jobs. Few counties in the U.S. have seen this level of structural change during a 10-year period.
- ***SECT remains extremely dependent on a handful of large employers.*** While SECT's economy is now more diverse than it was in the 1980s, the region remains highly dependent on a handful of very large employers. The largest five employers accounted for 36 percent of total county employment in 2002.
- ***Remaining manufacturing employment in the region is vulnerable to further declines.*** From a peak of 28,000 jobs in 1990, employment in manufacturing had declined by about 11,000 by 2002. In addition to the global shifts in manufacturing, the SECT region also must contend with a highly concentrated manufacturing base facing various pressures. The degree of specialization remaining in defense will be problematic for the region with the prospect of defense restructuring at the federal level.
- ***The shift in economic structure has resulted in a wide swing of jobs from high-paying to low-paying industries.*** As a result of a job shift from higher paying to lower-paying industries over the past decade, there have been some unsettling changes in the region. The 11,000 manufacturing jobs that were lost had an annual average wage of \$67,000, while the average annual wages in the new service sector jobs are about \$33,000.

Industry Clusters

The SECT region has identified six industry groups or clusters that are important to the regional economy. It is important to note that an economy is a complex system and seldom do industry clusters exist as discrete silos in the regional economy. Thus, when examining the

SECT industry clusters, it is not surprising to find that some industries are included in more than one cluster. *Figure 2* conceptually presents some of the areas of crossover.

Figure 2: Industries within a Region Serve Multiple Clusters



1. **BioScience Cluster:**

While there is considerable statewide interest in developing the bioscience cluster, much of that activity remains centered in the New Haven region. However, a significant part of the state's cluster is located in SECT, primarily in one large firm — Pfizer. Thus, while bioscience is

not really an industry cluster in the region at all, but a concentration of employment in one firm, the region remains an important part of the state's bioscience cluster efforts.

2. **Defense Cluster:** The Navy Submarine Base (SUBASE) and Electric Boat's nuclear submarine manufacturing facilities are the most significant parts of the defense cluster in the region. Electric Boat still employs an estimated 8,800 people (down from over 20,000 in the 1980s) and the Navy has 10,000 servicemen and women, civilian employees, and contractors. While the dependence of the region on this defense-related activity has diminished significantly over the last decade, Electric Boat and the Navy remain of critical importance to the local economy. In addition to the Navy and Electric Boat operations, there are other defense-related businesses in the region. To help protect the interests of the local area in response to further danger of closing/realigning the Groton SUBASE and to protect the largest part of the maritime economy in the county, the SUBASE Realignment Coalition has been formed. This group has been meeting with key people to develop a strategy to maintain the Navy's presence in the region after the late 2005 decisions are made by the Base Realignment and Closure (BRAC) Commission.
3. **Maritime Cluster:** The maritime cluster in SECT overlaps with many of the other clusters. We have defined this cluster to include all of the economic activities that are tied to the region's location on Long Island Sound. It is the region's historic ties to the sea that have been the foundation of its economic base for hundreds of years. The maritime cluster includes the activities of the U.S. Navy Submarine Base at Groton, maritime education and research at the UCONN Marine Sciences and Technology Center at Avery Point, the U.S. Coast Guard Academy and installations, Mystic Aquarium and Institute for Exploration, and Mystic Seaport: The Museum of America and the Sea. Cruise ship support activities include docking of the American Cruise Lines, Clipper Cruise Lines, and Holland America

Lines. Also included in the maritime cluster are Electric Boat, and sail and maritime instrument manufacturers. Some of the other maritime-related activities include the region's marinas, fishing boats, and ferries.

4. ***Tourism Cluster:*** The two most significant components of the tourism cluster in SECT are the maritime-related tourism activities and the two major casinos (Foxwoods and Mohegan Sun) that have been established and expanded in the region over the past decade. Together, the maritime-related tourism activities and casino activities have combined to make tourism the dominant cluster in SECT. By very conservative estimates, the tourism cluster, led by the casinos, has total sales of more than \$3.7 billion and employment of more than 28,000.
5. ***Creative Cluster:*** Not only are arts and cultural activities a core asset of the region, but the individual artists, nonprofit cultural institutions, and commercial enterprises that are tied to creativity are also an important economic cluster in the region, providing both jobs and income for residents throughout SECT. The full potential of this economic activity has yet to be fully realized, but there is growing recognition that the region's "creative cluster" can be an economic engine in itself.
6. ***Agriculture Cluster:*** Many of the communities within SECT are still largely rural and continue to have economic activities related to agriculture. While the scale of agricultural production is small, this cluster is important to the region's economic diversity as well as to maintaining its open space. The components of the agricultural cluster that are relatively strong in SECT are: dairy farming, poultry, mushrooms, and wineries. The agricultural sector is facing increasing pressures due primarily to growth pressures and high land costs. The challenge for the region is to identify agricultural uses whose value can justify the land costs. Within Connecticut, the two major areas that meet this criterion are wineries and horticultural uses.

The Future of the Regional Economy: Potential Scenarios

Scenario analysis is a commonly used method of visualizing and planning for future directions given certain conditions or developments. This type of analysis basically involves addressing one or more "what if" questions. An analysis of a variety of different future scenarios in the region found:

- ***Closing of the Submarine Base:*** The economic impacts associated with the closing of the Submarine Base would be quite severe and long lasting. Our analysis suggests that if both the base and the Electric Boat were to close, local impacts in New London would include the direct and indirect loss of \$2.4 billion in industry sales, the direct loss of more than 15,000 jobs, as many as another 8,000 due to the ripple effect, and a 15 percent drop in the gross regional product.
- ***Growth Scenarios:*** Using economic and demographic growth and shifts over the past decade as a base, trends were extrapolated into the future to develop some estimates of what one might expect to see by the close of this decade. If job growth returns to its 30-year trend over

the rest of this decade, one might expect to see net new jobs in the 7,500-10,000 range. If a new casino, or similar venue of equal size and draw, were to develop in the region, job growth could be as high as 20,000. Absent any interventions or policy shifts, the shift of jobs and population from urban to suburban towns will continue apace.

- ***New Casino Development:*** The possibility of a new casino or casinos being developed in the area seems to be increasing daily based on recent stories in the media. The potential impact of a new casino will be a function of its size and location relative to the two existing casinos. A new casino in the region, comparable in size to Foxwoods or Mohegan, would have pronounced and immediate effects. Chief among these would be a sharp increase in traffic on the arterials that would feed a third site. The competition for workers would become increasingly intense, possibly leading to a migration of new workers and families and a concomitant increase in demand for public services.
- ***Traffic Volume:*** As traffic continues to grow, and absent any increase in capacity, it is reasonable to expect congestion frequency and severity will increase steadily. And, as the traffic situation steadily worsens, it creates a host of environmental and quality of life issues. Over time, as traffic problems mount, it could create a disincentive for new investment and growth in the area.
- ***Major Tourism/Mixed Use Development:*** The site of the former Norwich Hospital is being considered for a variety of development options; chief among these is a major new tourism/mixed use venue. This proposal calls for investment approaching \$1 billion spread out in three phases over a 12-year period. Should this become the development project selected for the Preston-Norwich site, expected impacts could include: average daily traffic volume on I-395 exceeds planned capacity by 2008-2009 and the situation on I-95, already operating above planned capacity, deteriorates further; demand for housing increases, exacerbating the affordability issue; significant tightening of the regional labor market, resulting in increased levels of in-bound commutation; and the growth of an estimated 20,000 new jobs, most of which will be in the tourism/services sectors.

Regional Assets

Marine-related Resources

Marine-related resources have defined the SECT economy for centuries and remain one of the region's most critical assets upon which to build. From the fishing fleet in Stonington, to Mystic Seaport, to the Navy in Groton there is a wide range of activities that depend on proximity to the sea. There are many marine-related assets including: marine transportation, marine infrastructure, defense facilities, marine-related educational institutions (the *Coast Guard Academy* and *UConn Avery Point in Groton*), and research and development facilities (the *National Undersea Research Center*, the *Institute for Exploration at the Mystic Aquarium*, the *Ocean Technology Foundation*, and the *Coast Guard Research and Development Center*).

Academic Institutions

The SECT region has an extremely strong set of institutions of higher education that have a profound influence on the economic, cultural, and intellectual character of the region. The students, faculty, staff, alumni, and visitors associated with these colleges and universities contribute millions of dollars a year to the regional economy. These institutions are major employers and purchase goods and services from businesses throughout the region. They also provide residents and local employers, with an extremely diverse set of degree and non-degree programs. In addition, the colleges and universities attract young people as well as highly skilled faculty who come to teach and then make southeastern Connecticut their home. Higher educational institutions include: *Connecticut College, the University of Connecticut at Avery Point, Mitchell College, Rensselaer Polytechnic Institute at Hartford (RPI) — Groton Site, the United States Coast Guard Academy, the University of New Haven/Southeastern Graduate Center in New London, Three Rivers Community-Technical College, and The Lyme Academy of Fine Arts.*

Arts and Cultural Assets

For its size, SECT has an extraordinary number of arts and cultural institutions that provide residents with a wide array of opportunities for cultural enrichment, as well as providing an important “product” to market in the region’s tourism cluster. These assets are a critical component of the region’s quality of life and are the foundation of the creative cluster discussed earlier.

Locational Advantages within the Northeast Corridor

Southeastern Connecticut is located between the New York and Boston metropolitan areas — two of the largest markets in the nation. It is traversed by I-95, the most important highway on the east coast. Further, it is on the Long Island Sound, providing access to both marine transport and recreational boating. While not a low-cost region, it offers a somewhat lower cost of living than competing areas of the northeast with a similar package of assets and amenities. In addition, the region has a number of large development sites with access to major transportation networks. Southeast Connecticut, therefore, offers distinct locational advantages for firms looking for sites within the Northeast Corridor.

Regional Organizations

In southeastern Connecticut, there is a viable civic infrastructure, evidenced by the presence and capabilities of a number of organizations including: *Southeastern Connecticut Enterprise Region (seCTer), the Southeastern Connecticut Council of Governments (SCCOG), Eastern Connecticut Workforce Investment Board (EWIB), United Way of Southeastern Connecticut, The Rhode Island/Connecticut Collaborative, Chamber of Commerce of Eastern Connecticut, Greater Mystic Area Chamber of Commerce, Greater Norwich Area Chamber of Commerce, Mystic Coast and Country Travel Industry Association, and the Connecticut East*

Tourism District. In addition, there are a number of local economic development boards and organizations, and many of the utilities participate directly in economic development activities.

Modern, Multi-modal Transportation System

The southeastern Connecticut region is fortunate to have a wealth of multi-modal transportation options typically found only in much larger metropolitan areas. Transportation options include state and interstate highways; passenger and freight rail; passenger and vehicle ferry; marine freight; and air. This infrastructure provides multiple modes for both people and goods movement, and helps reinforce the region's connections to the major metropolitan markets in the northeast — New York, Long Island, and Boston.

- ***Interstate Highways:*** Interstate 95 forms the backbone of the regional highway network. It serves the entire Northeast Corridor and is the most heavily traveled highway in the nation. Other limited access highways in the region include I-395, which runs between Waterford and the Mass Turnpike in Worcester, Massachusetts; Route 2, which is a limited access highway from Norwich to Hartford, and a local road from Norwich to Stonington; and Route 11, a divided highway that begins at Route 2 in Colchester and dead ends in Salem at Route 82. Plans to complete Route 11 to Waterford at the interchange of I-95 and I-395 have been on the books for decades.
- ***Passenger Rail and Ferries:*** The region also enjoys access from passenger rail and ferries. Amtrak service stops at New London, Mystic, and nearby Westerly, Rhode Island. Shoreline East, a Connecticut-sponsored commuter service that extends eastward beyond the Metro-North terminus at New Haven, provides limited commuter rail service. Ferry service is provided between New London and Orient Point on Long Island, Fisher's Island, and Block Island.
- ***Rail Freight and Ports:*** The region has two rail freight lines — the New England Central Railroad on the west side of the Thames River, and the Providence and Worcester Railroad on the east side. The New England Center line provides rail access to the Central New England Railroad Pier adjacent to the Admiral Harold E. Shear State Pier at the Port of New London. Marine freight facilities are centered on the State Pier and adjacent Central New England Railroad Pier in New London, collectively referred to as the Port of New London.
- ***Air Access:*** The final link in the multi-modal chain is the Groton-New London Airport. The airport serves both scheduled air carrier/air taxi and general aviation purposes. In addition, T.F. Green Airport in Rhode Island, with much more extensive commercial passenger and cargo service, is 40-50 miles away, and Bradley International airport, located just north of Hartford, is also an hour's drive from most towns in southeastern Connecticut.

Utilities

The availability and cost of utilities, including water, sewer, natural gas, and electricity, can be a significant factor in many business location decisions. Southeastern Connecticut has multiple providers — private, public, and quasi-public — for these basic utilities. The area is somewhat unique in that it has four municipal utility companies that provide electric service, one

of which is also making a foray into the broadband Internet access business.

- ***Water and Sewer:*** municipal utility companies generally provide Water and sewer service in the region. The Southeast Connecticut Water Authority (SCWA) serves areas requiring water service outside of the municipal service areas. With the completion of the Thames Basin Regional Water Interconnection Project, excess water capacity in Groton will be available to service areas west of the Thames during peak demand. This project was funded in large part by the Mohegan tribe to address water demand at the casino complex, and is the most notable example of regional cooperation.
- ***Electricity and Gas:*** Throughout much of the region, electrical and natural gas service are provided by Northeast Utilities, specifically its Connecticut-based divisions, Connecticut Light & Power (CL&P) and Yankee Energy Group (or Yankee Gas). Norwich Public Utilities also provides natural gas service. Further, there are four municipal electricity providers that buy their power cooperatively through the Connecticut Municipal Electric Energy Cooperative (CMEEC). The region is also a significant source of electricity for the northeast. The Millstone Power Station, located in Waterford and owned by Dominion Resources, Inc., operates two commercial nuclear reactors and is the largest generating plant in Connecticut, providing one-third of the state's power.
- ***Communications:*** Although Connecticut has deregulated local phone service; SBC is still the dominant provider. SBC also offers high-speed Internet (including DSL) and wireless communications to the region. Comcast is the region's cable TV provider, and also provides high-speed Internet access to cable customers. Recently, Groton Utilities decided to enter the cable and broadband business, and is offering the service to its customers.

Quality of Life

Some of the elements that define a region's quality of life include its arts and cultural environment, its natural environment and associated recreational amenities, and the sense of "place." An analysis of the assets in SECT finds that while many regions extol their quality of life as one of their greatest assets, in SECT the combination of arts and cultural assets (discussed above), marine assets (discussed above), natural and recreational assets, and historic quality, combine to provide an unusually deep set of amenities leading to a very high quality of life.

Sources of Technology and Innovation

With the location of Pfizer, a major research facility in the biotech industry, as well as the marine- and defense-related research and development activities that are located in SECT, the region has a relatively rich potential in the area of technology and innovation. One measure of this capacity is in patent activity, a commonly used measure of innovation. Between 1994 and 2003, the number of patents issued annually in SECT has more than doubled, from 124 to 252.

Economic Development Challenges

While SECT has enormous economic assets upon which to build, it also faces a number of barriers to development that need to be addressed if the region is to reach its full potential and achieve the vision that it set for itself as part of the CEDS process. These challenges include:

- ***Serious shortages of housing:*** In 2002, SCCOG issued a report *Housing a Region in Transition: An Analysis of Housing Needs in Southeastern Connecticut, 2000-2005*. It resulted in the creation of the Blue Ribbon Housing Initiatives Panel. In March 2004, this report was updated. The report concluded that the region will fall far short of meeting the balance between owner-occupied housing and rental units forecast as needed by 2005 if current construction trends continue, leading to a significant shortage of rental units.
- ***Limited physical infrastructure at development sites:*** While the region has a significant amount of appropriately zoned commercial and industrial land available for development, much of this land lacks the necessary infrastructure to support development: roadway access, water, and sewer. The strategic provision of such infrastructure should be a major focus of future public investments.
- ***Periodic traffic gridlock in parts of the region:*** The southeastern Connecticut region suffers from two traffic problems caused by factors wholly outside local control — the growth in volumes along the I-95 corridor and traffic generated by the enormous popularity of the two casinos. The traffic problem on I-95 has several negative implications for economic development. First, it increases the costs of goods movement into and out of the region. Second, local commuters and residents also use I-95 — congestion increases commute and travel times and negatively impacts the quality of life. But, perhaps most importantly, I-95 is the primary route by which tourists access the region. As travel along this corridor grows increasingly frustrating, many of these tourists will start to consider other options for their leisure time.
- ***Ailing urban centers with older infrastructure:*** The region's two oldest urban centers, Norwich and New London, are beset by a number of urban ills including a concentration of population living near or below the poverty line; a declining tax base; abandoned industrial sites, many with environmental contamination; an aging building stock, much of it requiring significant inputs of capital to be made productive; and aging and strained infrastructure. These problems are more than just local issues. Their causes and impacts are region-wide.
- ***Growing diversity without the social infrastructure to address accompanying needs:*** The region has seen a significant increase in the number of immigrants and non-English speaking residents due to the lure of jobs at the two casinos. This rather rapid demographic shift has meant that the region has not had the time to develop the type of services that would be needed to serve this changing population. Public schools in the region have suddenly seen a rapid rise in the need for ESL services in their schools. Healthcare institutions do not have the translators needed to understand the needs of patients. And, many of the region's human service agencies lack counselors who can speak Chinese or Spanish. In short, the region must adjust many of its basic services to better accommodate the needs of these new residents.

- ***A fragmented civic infrastructure:*** Like many other regions of New England, SECT supports an array of organizations that are focused on strengthening the regional economy, supporting local employers, and ensuring the economic well being of residents. This “civic infrastructure” is not as strong as it could be and is constrained by a number of factors: the region has two separate tourism agencies; the individual cities and towns have built their own economic development capacity; initial efforts to cooperate with Rhode Island have not been fully realized; and there are a number of chambers of commerce in the region that operate independently.
- ***Fiscal challenges facing the municipalities in the region:*** Most of the cities and towns in SECT are facing increasing fiscal pressures. Much of this pressure is due to the over-reliance of the state on property taxes. The recent report of the Blue Ribbon Commission on Property Tax Burdens and Smart Growth Incentives concludes that this over-reliance on property taxes has led municipalities in Connecticut to limit residential developments that would result in an increase in public school students, has resulted in competition between neighboring cities and towns for commercial and industrial development, has led to land use policies that are designed to maximize local property tax revenues, has led to disinvestments in the cities and more urbanized areas, and, finally, has contributed to sprawl.

Strategic Plan

This CEDS builds upon the current state-of-the-art thinking in economic development around the nation. Some of the key conceptual elements that form the framework of this strategy are:

- ***The growing importance of regions as economic units.*** Communities are increasingly linked together in regional economic units. The economic well being of residents of a particular community is ultimately linked to the ability of the private sector in the entire region to thrive and compete successfully in a global arena.
- ***Integrating both the supply side and the demand side of the labor market.*** Most economic development plans tend to focus exclusively on labor demand — promoting employment growth in the private sector. There is often insufficient attention to labor supply — developing and supporting residents who can be productive contributors to the region’s economy. Developing the supply of workers means ensuring that residents of the region have basic occupational skills and are able to access jobs.
- ***Recognizing market realities and focusing on real competitive advantages.*** It is critical that communities in the region do not try to be something they are not. The region has some very strong areas of competitive advantage that could be further strengthened. The plan must build upon these advantages rather than focus on factors in which the region will never truly achieve competitive advantage in the global economy.
- ***Promoting investments in quality of life and amenity development.*** There is growing recognition in the economic development field that quality of life factors are of increasing importance. As labor becomes more mobile, skilled workers are attracted to those communities that offer them a higher quality of life. In addition, innovators and entrepreneurs seek to live and create businesses in communities with cultural and

environmental amenities.

- ***Addressing economic disparities.*** Economic disparities between the urban and suburban parts of the region are economic issues that affect the economic well being and quality of life of all residents living in the region. Moreover, it is not possible to sustain a strong regional economy with a large concentration of poor residents living in the region's urban centers.
- ***Adhering to Smart Growth.*** Much has been written about the problems associated with urban sprawl throughout the U.S. and the need to develop investment strategies that promote development in areas already served by infrastructure and to conserve open space on the urban fringe. While this economic development strategy does not cover all of the critical policies and investments needed to implement a Smart Growth agenda in the region, the strategies and action steps are designed to conform to the general principles of Smart Growth.
- ***Rejecting the idea of a quick fix.*** Economic development is a long-term process. The economic challenges faced by the southeastern Connecticut region cannot be tied to one factor, and its continued recovery will not come from any one or two high-profile projects. It is important to remember that the focus is on economic *development*, not solely economic *growth*, and development implies more fundamental changes that take time.

Guiding Principles

In addition to the conceptual framework supporting the development of this plan, the following operational principles guide the approach:

- ***Building upon previous work.*** The CEDS builds upon some of the pre-existing work and strategic thinking that has been undertaken in the region.
- ***Balancing municipal and regional priorities.*** The CEDS is a regional strategy that focuses on initiatives and projects that are of regional significance. Each municipality within the region may still have other significant priority programs and projects that focus on enhancing its own community's economic vitality.
- ***Multi-organizational responsibility.*** While seCTer and SCCOG are the sponsors of the CEDS, the strategies and action steps involve numerous institutions throughout the region. Different organizations will be assigned responsibilities within the CEDS. A formal process has been developed to reach consensus on responsibilities and to ensure accountability.
- ***The engagement and sustained commitment from a broad set of leaders.*** The transition from planning to implementation requires leadership, commitment, coordinated action, and risk taking.
- ***An inclusive process that reflects the diversity of the region.*** Much innovation emerges from the bottom-up and from the synergies created through building trust and dialogue amongst groups that often do not sit at the same table. A real commitment to bringing to the table a broad set of actors representing the various interests and diversity in the region is important.

Mission Statement and Summary of Goals

In southeastern Connecticut, a comprehensive economic development strategy must *fundamentally* seek to improve the economic lives of existing residents, to improve the region's

quality of life so that existing residents will remain after they have achieved some level of economic health, and to provide the impetus to draw new residents to the region. Thus, the vision or mission statement guiding this strategic plan is the following:

Promote balanced, diversified, and sustainable regional economic growth that produces shared prosperity, encourages continuous individual achievement, and conserves our existing natural resources.

With this as a vision, the strategic planning effort has focused on the following goals that could have longer-term and deeper impacts on the quality of life for all citizens of the region:

Goal One: Promote a more effective and efficient civic infrastructure that enhances collaboration around economic development and unites the region behind a common vision. **Goal Two:** Ensure the continued strength of existing economic clusters while seeking to diversify the economy through the development of new employment opportunities.

Goal Three: Build the physical infrastructure needed to support the region's economic transformation.

Goal Four: Promote career ladder opportunities that can move low-wage workers into careers providing a family wage.

Goal Five: Enhance the regional quality of life, balancing vibrant urban centers, rural areas with open space, and sound suburban communities.

Implementing the Plan

The following guidelines are intended to help the CEDS Implementation Committee (CIC) implement the region's economic plan.

- ***Maintaining momentum is critical.*** The plan needs to move forward on several fronts. Even though economic development is a long-term effort, short-term progress is very important to maintaining community support. We propose to update the CEDS through quarterly meetings so the Committee knows about the short-term and long-term progress related to the CEDS.
- ***Starting with several projects or programs that are relatively simple to implement.*** For example, certain programs will be singled out for immediate attention so that we can demonstrate some tangible results within the first six months. This list will be completed no later than September 2004. This gives the implementation effort a degree of credibility that is often needed at the beginning of an economic development initiative.
- ***Engaging all stakeholders early in the implementation process is important.*** This CEDS is comprehensive and needs to engage all of the relevant stakeholders in the southeastern Connecticut region if it is to be successful. The collaboration needs to occur with the cities and towns, other regional organizations, the business community, as well as the state of Connecticut. While seCTer and SCCOG should be the lead agencies responsible for plan implementation, buy-in from all stakeholders needs to be attained, some of whom are:
 - CSC - CEDS Strategy Committee
 - CIC - CEDS Implementation Committee
 - SCCOG - Southeastern CT Council OF Governments
 - seCTer - SouthEastern CT Enterprise Region
 - EWIB - Eastern Ct Workforce Investment Board
 - CTEAST - Tourism District of Eastern CT
 - MC&C - Mystic Coast & Country Travel & Industry Assoc.
 - CSBDC - CT Small Business Development Center
 - CCECT - Chamber of Commerce of Eastern CT
 - MCC - Greater Mystic Area Chamber of Commerce
 - NCC - Greater Norwich Area Chamber of Commerce
 - NCDC - Norwich Community Development Corporation
 - NLDC - New London Development Corporation
 - BRHIP - Blue Ribbon Housing Initiatives Panel
 - MNST - Main Street
 - U/W - United Way of Southeastern CT
 - SEAT - SouthEast Area Transit District
 - GAC - RT 11 Greenway Authority Commission

- TRCC - Three Rivers Community College
- GTNC - City of Groton
- GTNT - Town of Groton
- WTFD - Town of Waterford
- NLON - City of New London
- NRW - City of Norwich

Monitoring and Evaluating the CEDS

The monitoring and evaluation process will have two major elements:

1. ***Quarterly reports generated by seCTer staff and submitted to the CEDS Implementation Committee.*** seCTer staff will write a brief report on progress to date in reaching the performance milestones in the implementation matrix. The Implementation Committee will identify any significant barriers and constraints to implementation based upon this report and will help to facilitate a process for moving the action steps forward.
2. ***Annual Regional Implementation Team Meetings.*** seCTer will coordinate and lead annual meetings of the CEDS Strategy Committee with all key stakeholders that focus specifically on progress in implementing key elements of the CEDS. These meetings will also be an opportunity to troubleshoot coordination issues as well as to mobilize around any new economic development opportunity that arises in the region.

Managing the CEDS — Oversight

The CEDS Strategy Committee, which has overseen the development of the CEDS, will oversee the implementation of the CEDS and will host an annual meeting of all key stakeholders in the region. The CEDS Implementation Committee will be comprised of members of the CEDS Strategy Committee along with SCCOG and seCTer staff. The CIC will meet quarterly to monitor progress in implementation and report to the CEDS Strategy Committee. At the first meeting of the CIC, it will review the initial prioritization of Goals/Strategies/Action Steps and Projects that may be eligible for funding.

Methodology of Data Collection

The CEDS Implementation Committee will use several methods to ensure the implementation of the CEDS and to measure progress. Each of the five Goals has a number of Strategies and associated Action Steps. For each Action Step, the CIC will assign the following:

1. ***RESPONSIBILITY:*** The Lead Organization/Stakeholder that accepts ownership for implementing the Action Step.
2. ***PRIORITY:*** Assigned as follows:
 - HIGH = Critical to the Economic Strategy of SECT
 - MED = Essential to the Economic Strategy of SECT or Critical to the Economic Strategy of a Municipality

- LOW = Important to the Economic Strategy of SECT or a Municipality
3. **TIME FRAME:**
- 1-3 = Start within 1 year/finish within 3 years
 - 3-6 = Start within 3 years/finish within 6 years
 - 5-10 = Start within 5 years/finish within 10 years
 - ONG = Ongoing
4. **PERFORMANCE MEASURE:** The numerical month and year in which a specific Action Step Milestone is scheduled to be accomplished and the identification of the Milestone. In addition, status/progress will also be indicated with a numerical rating system.

Rating Projects Eligible for EDA and/or Other Funds

The CEDS has assembled a list of projects from municipalities in the region. Each may be a candidate for EDA or other funding. The identification of projects, as well as the rating of projects, will be a shared responsibility of the CEDS Strategy Committee, the CIC, and SCCOG and will require the consensus of all three entities. A matrix to evaluate projects that includes three major categories has been developed. A Project Review Form must be completed by the appropriate municipality/sponsor for each project to be discussed and scored by the Strategy Committee, the CIC, and SCCOG. Clear linkage must be specified between the recommended Project and one or more Action Steps of the CEDS.

Conclusion

In the early 1990s, the southeastern Connecticut region was faced with a major economic crisis — the loss of a significant number of defense-related jobs. The region came together at that time and developed a new regional vision, designed a set of strategies for realizing that vision, and spent a decade on a successful implementation process. The region now faces a new set of challenges. This CEDS process has allowed the region to again come together to reach consensus on a vision, to achieve a new understanding of its key assets as well and critical challenges, and to work together to develop a new set of strategic responses.

Coming up with the vision and strategies is only the first step in the process. What distinguishes the most successful regions is the ability to take the bold actions needed to implement strategies. Successful implementation will require forward thinking leadership at the local and regional levels, a collaborative mindset, a well defined process for moving forward, and the flexibility to adjust strategies as conditions evolve. The region has already shown a commitment to this approach through its CEDS planning process. The CEDS can be viewed as a living document designed to further guide this effort.

Goal One: Promote a more effective and efficient civic infrastructure that enhances collaboration around economic development and unites the region behind a common vision.

STRATEGIES AND ACTION STEPS	RESPONSIBILITY	PRIORITY	TIME FRAME	PERFORMANCE MEASURE
A. Establish a CEDS Implementation Committee				
1. Convene key organizations with region-wide focus	CSC	HIGH	1-3	9/04 MTTG 3
2. Hold a one-day Regional Economic Development Forum	seCTer/SCCOG	HIGH	1-3	9/04 FORUM 3
3. Meet regularly to coordinate implementation of CEDS and to evaluate its progress	CSC/CIC	HIGH	ONG	9/04 MTTG 3
4. Coordinate and assist in the implementation of region-wide initiatives	CIC	HIGH	ONG	9/04 MTTG 3
5. Minimize redundancy in support organizations by promoting collaboration and partnerships	CIC	HIGH	3-6	TBD TBD TBD
B. Research and Design Regional Fiscal Equity Initiative				
1. Increase awareness of residents and municipal leaders about the benefits of regional action	seCTer/SCCOG	MED	1-3	12/04 SEMINAR 3
2. Identify and implement service sharing projects	SCCOG	HIGH	1-3	12/04 THAMES BASIN PROJ. 4
3. Develop pilot tax sharing project (Refer to Goal Three, Strategy C)	seCTer/SCCOG	HIGH	3-6	TBD TBD TBD
C. Design and Implement a Regional Image Campaign				
1. Undertake a charette focused on regional “themes” to promote through an image campaign	CIC	LOW	3-6	3/05 CHARETTE TBD
2. Develop a common theme across regional marketing and promotional material	CSC	LOW	3-6	9/05 CAMPAIGN KICKOFF TBD
D. Build a More Diverse Leadership Base				
1. Create a community leadership program that includes a mentoring component	CIC/CCECT	MED	1-3	1/05 MOD PROGRAM 3
2. Encourage participation of community-based groups and organizations representing the minority community in regional civic activities	U/W	HIGH	1-3	9/04 MTTG 3

Goal Two: Ensure the continued strength of existing economic clusters while seeking to diversify the economy through the development of new employment opportunities

STRATEGY AND ACTION STEPS	RESPONSIBILITY	PRIORITY	TIME FRAME	PERFORMANCE MEASURE
A. Promote Small Business Development and New Entrepreneurship				
1. Establish a One-Stop Business Resource Center	CSBDC	MED	3-6	TBD TBD 3
2. Establish SECT Small Business Network	CCECT	MED	3-6	TBD TBD TBD
3. Develop initiative to support immigrant and ethnic entrepreneurship (part of larger Regional Newcomer Initiative)	seCTer/CSBDC	MED	3-6	12/04 NEEDS ASSESSMENT TBD
4. Target entrepreneurs in regional marketing campaigns	seCTer/CSBDC	MED	ONG	12/04 PROGRESS RPT 3
5. Develop a Business Calling Program	CCECT	MED	3-6	TBD TBD TBD
6. Promote youth entrepreneurship	EWIB	MED	3-6	TBD TBD TBD
B. Support the Growth of the Maritime Cluster				
1. Develop regional maritime infrastructure initiative	seCTer	HIGH	ONG	6/04 COALITION MTTG 3
2. Promote R&D and commercial applications related to maritime security	seCTer	HIGH	ONG	6/04 COALITION MTTG 3
3. Enhance linkages between the educational system and maritime activities	TBD	TBD	TBD	TBD TBD TBD
C. Ensure the Continued Strength of the Region's Defense-related Facilities and Companies				
1. Support the activities of the Subase Realignment Coalition	seCTer	HIGH	1-3	6/04 COALITION MTTG 3
D. Promote the Region's Arts and Cultural Strengths as a Regional Economic Engine				
1. Establish a regional creative cluster council	seCTer/CTEAST	MED	3-6	TBD TBD TBD
2. Improve regional marketing of cultural programs and events	CTEAST	MED	3-6	TBD TBD TBD
3. Develop artist live-work space in downtowns and old mill buildings	TBD	TBD	TBD	TBD TBD TBD

E. Further Support the Region’s Tourism Industry and Ensure that its Development Provides Maximum Economic Benefits for Residents and Businesses in the Region						
1. Update region-wide tourism development and marketing plan and build consensus on implementation priorities	CTEAST/MC&C	HIGH	1-3	9/04 MTTG	3	
2. Promote agricultural tourism	CTEAST/MC&C	MED	3-6	TBD TBD	TBD	
3. Develop one or more new events that promote regional “community building” and/or attraction of non-local visitors	CTEAST/MC&C	MED	3-6	TBD TBD	TBD	
4. Establish cooperative initiatives with adjacent regions	CTEAST/MC&C	HIGH	1-3	9/04 MTTG	3	
5. Capitalize a regional tourism development fund	TBD	TBD	TBD	TBD TBD	TBD	
F. Support Economic Opportunities in Agriculture to Create Jobs and to Preserve the Region’s Natural Landscape						
1. Form a regional subgroup within the state’s agricultural industry cluster initiative to work on issues to support the retention and strengthening of the regional agricultural base	TBD	TBD	TBD	TBD TBD	TBD	
G. Expand the Labor Pool for Regional Employers by Retaining More Older Workers in the Workforce	EWIB	MED	1-3	TBD TBD	TBD	

Goal Three: Build the infrastructure needed to support the region's economic transformation

STRATEGY AND ACTION STEPS	RESPONSIBILITY	PRIORITY	TIME FRAME	PERFORMANCE MEASURE
A. Strengthen the Region's Intermodal Transportation System				
1. Concentrate transit efforts on two groups — tourists and casino workers	SCCOG/SEAT	HIGH	1-3	9/04 RPT 3
<ul style="list-style-type: none"> Partner with the casinos to improve transit where casino workers are clustered Explore the possibility of high-image, "fun" transit connections between the casinos and the intermodal terminal in New London, including use of the rail line, ferries, etc. Use seasonal transit service to link the region's numerous small tourist attractions 	SCCOG/SEAT	HIGH	1-3	9/04 RPT 3
2. Continue to promote New London as the transportation hub of the region	SCCOG/NLON	HIGH	ONG	TBD TBD TBD
<ul style="list-style-type: none"> Integrate all modes of transportation — Amtrak, local bus, ferry, and Interstate 95 Partner with Amtrak and a rental car company to provide easy and seamless access to rental cars at the train station and ferry terminal Consolidate other traveler information at the train station Focus on coordination and marketing to enhance existing infrastructure Explore the possibility of expanding Shoreline East service to New London 	SCCOG/NLON	HIGH	ONG	TBD TBD TBD
3. Extend Route 11 to Waterford and the interchange with I-95 and I-395 as the priority roadway (and associated Greenway) project	SCCOG/GAC	HIGH	ONG	9/05 EIS 2
4. Expand roadway capacity to the casinos, especially Foxwoods	SCCOG	HIGH	5-10	TBD EIS 2
B. Provide Sites and Utilities Needed to Support the Region's Economic Development Priorities				
1. Expand availability of appropriate sites with necessary access and utilities	SCCOG	MED	3-6	TBD TBD TBD
2. Provide support for the development of the Regional Water Network	SCCOG	HIGH	1-3	5/04 CONTRACT 4
C. Support the Development of New and Affordable Housing Options in the Region				
1. Adopt a "fair share" approach to equitably distribute regional housing responsibilities	BRHIP	HIGH	1-3	TBD TBD TBD
2. Adapt particular housing strategies for each community	BRHIP/SCCOG	HIGH	3-6	TBD TBD TBD
3. Aggressively pursue a revenue sharing strategy to offset costs associated with housing	BRHIP/SCCOG	HIGH	3-6	TBD TBD TBD
4. Encourage the State Legislature to strengthen the state's affordable housing laws	BRHIP	MED	3-6	TBD TBD TBD
5. Secure funding to sufficiently staff regional housing initiatives	BRHIP	HIGH	1-3	TBD TBD TBD

Goal Four: Promote career opportunities that move low wage workers into careers providing a family wage						
Strategy and Action Steps		Responsibility	Priority	Time Frame	Performance Measure	
A. Further Enhance the Positive Relationship between Workforce Development System and Economic Development						
1. Integrate regional and local strategic planning for economic and workforce development		EWIB	HIGH	1-3	1/05 RPT	3
2. Further engage regional chambers of commerce in the region’s workforce development activities		EWIB/CCECT/MCC/NCC	HIGH	1-3	1/05 RPT	3
3. Involve workforce development organizations in business expansion, retention, and recruitment efforts		EWIB/seCTer	HIGH	1-3	1/05 RPT	3
B. Establish a Regional Newcomer Initiative		TBD	MED	3-6	TBD TBD	TBD
C. Develop a Tourism Career Ladder Initiative						
1. Organize a collaborative effort involving key participants		EWIB/CTEAST/MC&C	MED	1-3	TBD TBD	TBD
2. Expand hospitality management degree program at Three Rivers Community College		TRCC	MED	3-6	TBD TBD	TBD
D. Develop Healthcare/Biomedical Training Initiative						
1. Develop an industry cluster approach to healthcare training		EWIB	MED	1-3	TBD TBD	TBD
2. Develop regional healthcare and biomedical career education and exploration program aimed at the region’s high schools		EWIB	MED	1-3	TBD TBD	TBD
E. Maintain and Augment the Capacity to Produce a Highly-skilled Manufacturing Workforce						
1. Develop longer-term strategy to replace retiring highly-skilled workers at EB and other advanced manufacturing firms in the region		EWIB	HIGH	1-3	TBD TBD	TBD
F. Develop a Regional Career Literacy Initiative Targeted at K-12 Education					TBD	TBD
G. Engage Regional Economic Development Organizations in Policy Advocacy around Critical Regional Education and Workforce Development Issues					TBD	TBD
1. Continue to support the timely consolidation of Three Rivers Community College campuses		TRCC/NCDC/NRWH	HIGH	1-3	TBD TBD	3
2. Fill gaps in available degree and certificate programs		TBD	TBD	TBD	TBD TBD	TBD
H. Expand Construction Training Capacity to Maximize Resident Employment in New Development Projects		EWIB	MED	1-3	TBD TBD	TBD

Goal Five: Enhance the regional quality of life, balancing vibrant urban centers, rural areas with open space, and sound suburban communities					
STRATEGY AND ACTION STEPS	RESPONSIBILITY	PRIORITY	TIME FRAME	PERFORMANCE MEASURE	
A. Enhance the Downtowns of the Larger Cities in the Region					
1. Reconceive downtown New London as a waterfront residential community	NLON/NLDC	MED	1-3	TBD TBD	TBD
2. Reposition Norwich as a regional center for entertainment, dining, and unique shopping	NRWH/NCDC	MED	1-3	TBD TBD	TBD
3. Emphasize culture and entertainment in New London and Norwich	NLON/NLDC NRWH/NCDC	MED MED	1-3 1-3	TBD TBD TBD TBD	TBD TBD
4. Develop a comprehensive circulation and parking strategy for Norwich	NRWH/NCDC	MED	1-3	9/04 RPT	3
5. Partner with the Main Street to explore an ethnic shopping strategy for New London and Norwich.	NLON/NLDC/MNST NRWH/NCDC/MNST	MED MED	1-3 1-3	TBD TBD TBD TBD	TBD TBD
6. Consider establishing Wireless Fidelity (WiFi) zones in downtown Norwich and New London	NLON/NLDC NRWH/NCDC	LOW LOW	3-6 3-6	TBD TBD TBD TBD	TBD TBD
B. Promote Regional Sustainable Land Use Policies					
1. Develop smart growth policies that support and complement regional economic development	SCCOG/MUNICIPALITIES	HIGH	1-3	TBD TBD	TBD
2. Preserve and enhance the historic built environment	SCCOG/MUNICIPALITIES	MED	ONG	TBD TBD	TBD
3. Protect and preserve the region’s rural places	SCCOG/MUNICIPALITIES	MED	ONG	TBD TBD	TBD
4. Emphasize high design standards for new development	TBD	TBD	TBD	TBD TBD	TBD
C. Enhance Recreation Opportunities and Protect Open Space					
1. Increase shoreline access and trails wherever possible	SCCOG	MED	ONG	TBD TBD	TBD
2. Develop tourism strategies that enhance open space and recreational assets for residents and visitors alike	CTEAST/MC&C	HIGH	1-3	9/04 RPT	3
3. Develop initiatives to preserve agricultural lands and other open space	TBD	TBD	TBD	TBD TBD	TBD

CHAPTER I:

INTRODUCTION

The Southeastern Connecticut Region (SECT), which includes the 21 municipalities within New London County, has undergone a radical restructuring of its economy over the past decade. In fact, this region has probably experienced a more fundamental economic transformation than any other region in the Northeast. SECT is home to both the Naval Submarine Base New London in Groton, the Atlantic homeport for nuclear attack submarines, and Electric Boat, which designs, manufactures, and repairs submarines for the U.S. Navy. In 1990, these two facilities, along with the many contractors and subcontractors, provided about 37,000 high paying jobs for residents of the region. Moreover, with more than \$10,000 per capita in defense expenditures, New London County was the most defense-dependent county in the nation.

With defense downsizing in the 1990s, regional leaders grew increasingly concerned about the potential economic impacts of anticipated job losses. This led to the creation in 1990 of a grassroots organization called the Southeastern Connecticut Economic Development Coalition. Hundreds of individuals from business, government, labor, education, the economic development community, and private citizens participated in an effort to develop and implement a strategic action plan for the region's future. The SouthEastern Connecticut Enterprise Region (seCTer), a public-private partnership of municipalities, business, higher education, labor, and community organizations serving the area encompassing New London County, was established with the mission of strengthening and diversifying the region's economy.

By 2000, as anticipated, 17,000 defense-industry positions were eliminated. While this could have been an economic disaster, what could not have been forecast in the early 1990s was the explosive growth in what has become the region's new economic strength, the tourism and entertainment industry cluster, primarily through the development and eventual expansion of two major casinos — Foxwoods and Mohegan Sun. By 2004, with over 20,000 jobs at the two casinos, the region has become almost as dependent upon these two entities as it was in the 1990s on the Submarine Base and Electric Boat.

Clearly, the growth of jobs in the gaming industry in SECT has lessened the economic impact of defense downsizing. However, there have also been additional challenges created by this economic transformation:

1. The continued over-dependence on a few large employers.
2. Concerns about the quality of jobs being created.
3. Increased demands on the region's infrastructure brought about by growth in the more rural communities and a significant increase in visitors to the region.

4. A housing crisis that is characterized by a limited supply of units, limited choice of housing types and locations, and an increasing lack of affordability.

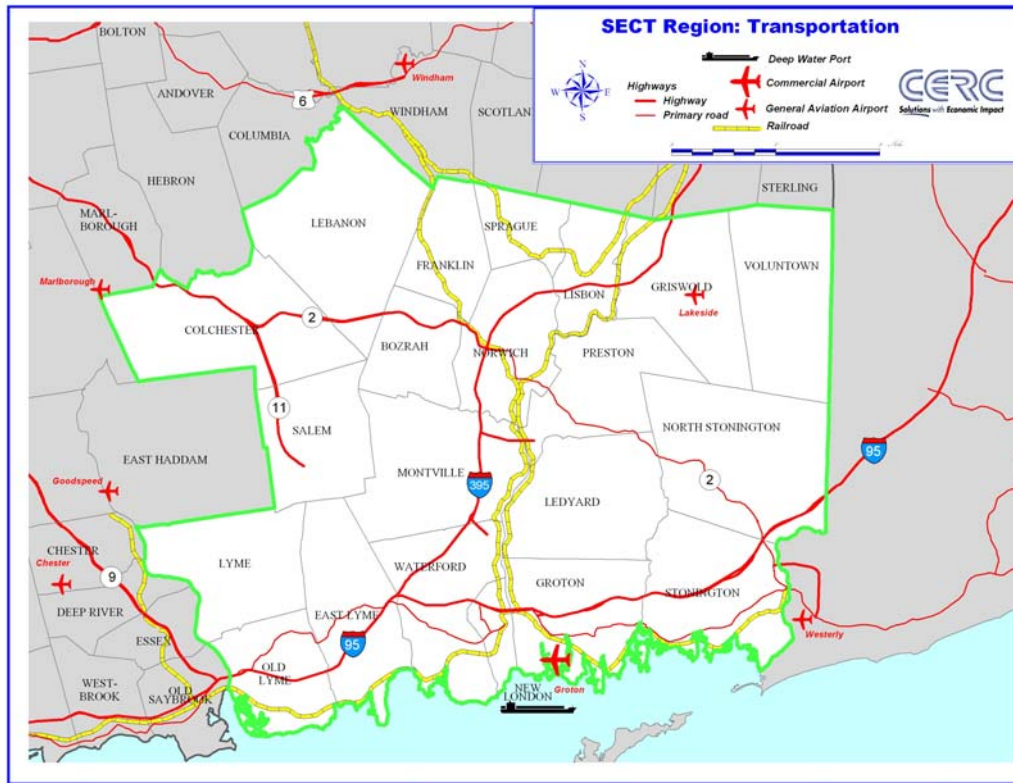
The region has recognized that these new challenges will require a new strategic approach. And, this approach, like those in the past, will have to be regional in nature. While the 21 cities and towns in SECT have their own distinct characters and visions, their economic futures are clearly being shaped by the same forces. Only through addressing these challenges on a regional basis can the individual cities and towns hope to achieve the vision for their own communities.

Realizing that the 1992 Strategic Plan had provided a critical blueprint for the region's efforts to rebuild its economy, seCTer and the Southeastern Connecticut Council of Governments (SCCOG) decided to update the strategic plan in 2003, and embarked upon a strategic planning process with the goal of creating a regional Comprehensive Economic Development Strategy (CEDS). This process served two purposes. First, a CEDS is a prerequisite for assistance under the U.S. Economic Development Administration's Public Works and Economic Adjustment Programs. Once EDA accepts the CEDS document, projects in the region will be able to access federal resources that were not previously available. The second and equally important reason for undertaking the strategic planning process was to bring together in one document all of the creative thinking and previous strategic planning that has been occurring in the southeastern Connecticut region. The intent of this process is to create a common understanding of regional economic development and to bring all of the region's stakeholders together around a common set of priorities and a common vision for the future. This report is the culmination of that process.

Definition of the Region

The southeastern Connecticut region includes all of the municipalities within New London County, which lies in the southeastern region of Connecticut and encompasses 21 towns. Based on the 2000 Decennial Census, the county spans 666 square miles and is home to 259,088 residents equating to a population density ratio of 389.1 persons per square mile, compared to the state ratio of 702.9.

Figure 1.1: Map of SECT Municipalities



As shown in Figure 1.1, the SECT region has interstate highways that run north-south and east-west. Rail also runs in tandem with the interstates and primary roads. There is one deep-water port located in New London, and regional airports are located in both Griswold and Groton. Groton-New London Airport offers a small number of scheduled flights while Lakeside in Griswold is a small general aviation airport.

The SECT region has a long and rich history dating back to 1645 when the city of New London was first settled. With its abundant maritime resources, the area became a natural hub of trade and commerce, with merchant ships key to the region's foreign trade, both with the West Indies and with Europe. For much of the 18th and 19th centuries, New London Harbor was a focal point of whaling. In fact, one of the nicknames for New London is the "whaling city."

The region has long capitalized on its maritime resources as evidenced by the level of associated activity even today. Ranging from recreational and commercial fishing, to salt water beaches, to the U.S. Navy Submarine Base and Coast Guard Academy, the regional economy has strong and long-lasting links to the sea.

In addition to its economic value, the proximity to Long Island Sound contributes immeasurably to the quality of life in the area, due both to the moderating effects of the water on the regional climate, and the myriad recreational opportunities afforded visitors and residents.

The Thames River is another major water resource in the SECT region. Running from the Sound up to Norwich, it is a major artery for waterborne traffic, both commercial and recreational.

In terms of land use, the region still has a large amount of open space and much of the region remains primarily rural in nature.

One of the remarkable natural areas in the region is the Pawtucket Borderlands, a 200-square-mile hardwood forest that is bordered by Interstates 95 and I-395, and Routes 2 and 14A. The area includes Voluntown, North Stonington, Sterling, Griswold, Preston, and Plainfield in Connecticut, as well as several towns in Rhode Island. The Pachaug State Forest and the Acadia Management Area protect almost 40 percent of the Borderlands.

There are almost 100,000 households in the county, with a median annual household income of \$50,646, compared to \$53,935 statewide. In 2002, employment in the region was slightly more than 127,700 and gross regional product (GRP), the market value of the goods and services produced by the labor and property located in the region, was estimated at \$9.6 billion.

Figure 1.2: Overview of the SECT Region

	Year	New London County
Population	2000	259,088
Households	2000	99,864
Median Household Income	2000	\$50,646
Per Capita Income	2001	\$33,112
Employment	2002	127,729
Gross Regional Product	2002	\$9.6 billion

Source: U.S. Census, CT DOL, Economy.com, D&B Sales & Marketing Solutions.

Organization and Staffing for CEDS

The Southeastern Connecticut Council of Governments and SouthEastern Connecticut Enterprise Region formed the Southeastern Connecticut CEDS Strategic Planning Committee in late 2002. The CEDS Strategy Committee membership is broadly inclusive of local government, business (including finance, utility, and tourism), tribal nations, organized labor, the arts community, social services, education, minorities, and women. The Committee leadership and initial membership were selected in April and May 2003. The Chairman is Mr. Tony Sheridan, a former Chief Elected Official (First Selectman, Town of Waterford) and current President of the Chamber of Commerce of Eastern Connecticut. The following three Vice-Chairmen were also selected: (1) Dr. Grace Jones, President, Three Rivers Community College; (2) Paul Brycki, First Selectman, Town of Griswold; and (3) Angela Arnold, President, American Ambulance Service.

Additional members were solicited in June and July 2003 to bring the total membership to 44, plus three staff. (See Attachment A)

The CEDS Strategy Committee has held eight meetings, all of which have been open to the public and press. An initial formation meeting was held in May 2003 for the purpose of introducing the CEDS Strategy Committee leadership and briefing contributors, volunteers, and Committee candidates on the CEDS process, goals, and objectives. A second meeting in August 2003 had as its primary objective introduction of the CEDS Strategy Committee members to each other and to the project consultant team, headed by Beth Siegel, President, Mt. Auburn Associates. In September 2003, the third committee meeting was held at SCCOG headquarters, at which time members received a progress report and an initial state and regional data analysis report from Jeff Blodgett of the Connecticut Economic Resources Center (CERC), one of the CEDS Project Team subcontractors. The fourth meeting was held in November, concurrent with the seCTer Annual Meeting. In addition to a progress report on key interviews conducted throughout the region and facilitated by members of the CEDS Strategy Committee, an important briefing on a preliminary data analysis of one of the most critical future scenarios for the region was presented by Jeff Blodgett. At the fifth meeting in January 2004, additional scenario data analysis was presented and the consultant team presented an initial report on the Competitive Strengths and Barriers for the region. At this meeting, the Committee also reviewed and discussed the draft Vision and Goals for the Southeastern Connecticut CEDS.

In April 2004, a sixth meeting was held at Three Rivers Community College to discuss and receive comments on the preliminary Strategy Recommendations and draft Projects List. A seventh meeting was held in May to review and comment upon the Draft CEDS Report, and a final meeting will be held in June to adopt the Southeastern Connecticut CEDS Strategy and Report. A full list of members of the CEDS Strategy Committee is attached as Attachment A.

In addition to the meetings with the CEDS Strategy Committee, the consulting team interviewed almost 250 stakeholders including both large and small businesses, representatives from each of the towns in the region, businesses in each of the economic clusters that were identified, community-based organizations and nonprofit human service providers, representatives of the region's academic institutions, bankers, representatives of the region's arts and cultural community, and many other individuals who have been involved in all aspects of the region's economic well-being. (See Attachment B for a listing of those interviewed.)

Organization of the Document

The report that follows is a culmination of a research and planning process that has involved the following:

- analysis of secondary data on the region's economy;
- interviews with almost 250 key stakeholders;
- research on the region's key economic clusters;
- economic modeling of a variety of economic scenarios.

The second two chapters of the report provide the “situation analysis” and serve to identify the key economic challenges and opportunities. This analysis includes:

- Chapter 2: Economic Analysis: Performance, Structure, Economic Clusters, and Potential Economic Scenarios
- Chapter 3: Analysis of Regional Assets and Barriers

The fourth chapter of the report includes the detailed strategies and action steps under the five goals that have been established by the CEDS Strategy Committee. These goals are:

- Goal 1:** Promote a more effective and efficient civic infrastructure that enhances collaboration around economic development and unites the region behind a common vision.
- Goal 2:** Ensure the continued strength of existing economic clusters while seeking to diversify the economy through the development of new employment opportunities.
- Goal 3:** Build the infrastructure needed to support the region’s economic transformation.
- Goal 4:** Promote career opportunities that can move low-wage workers into careers providing a family wage.
- Goal 5:** Enhance the regional quality of life, balancing vibrant urban centers, rural areas with open space, and sound suburban communities.

The final chapter discusses the implementation process as well as a list of the strategic priorities and the current priority projects that have been identified by the municipalities.

CHAPTER II:

ECONOMIC ANALYSIS

Overview

A strategic plan for SECT must be designed to address the specific economic challenges that residents and businesses in the region face. The plan also needs to build upon areas of economic opportunity. This chapter provides a summary of the key economic findings that provide the foundation for the strategic plan that follows. It looks at the economy of the region through four lenses:

1. The economic performance of the region — an analysis of demographic trends and the overall economic well-being of residents of the region.
2. The economic structure — analysis of the composition of jobs in the region and how it has changed over the past decade.
3. The industrial clusters — analysis of the core “economic engines” that have been driving the regional economy and provide potential for job growth and development.
4. Economic scenarios — examination of potential impacts of various “what if” scenarios on the regional economy.

This chapter provides a summary of key findings. A more detailed analysis is provided in Appendix A.

Economic Performance

The following section summarizes the economic performance of the regional economy and the demographic characteristics of its residents. The economic performance provides a picture of how well the region has been doing in terms of job growth, unemployment, and the economic conditions of its residents. The demographic analysis provides critical insights into the region’s existing and potential labor force.

♦ *The population of SECT has shifted dramatically over the last century, and after a long period of slow growth, population has been growing more rapidly over the past few years.*

With a total population of 259,088 in 2000, the 21 towns in the southeastern Connecticut region accounted for 7.6 percent of the total population in Connecticut. The three urban centers — Groton, Norwich, and New London — together account for nearly 40 percent of the population in the SECT region. The largest population growth for the region occurred in mid-century — the years between 1940 and 1970 accounted for 60 percent of SECT’s population growth in the 20th century. In each decade since 1970, the population growth in the U.S. has been

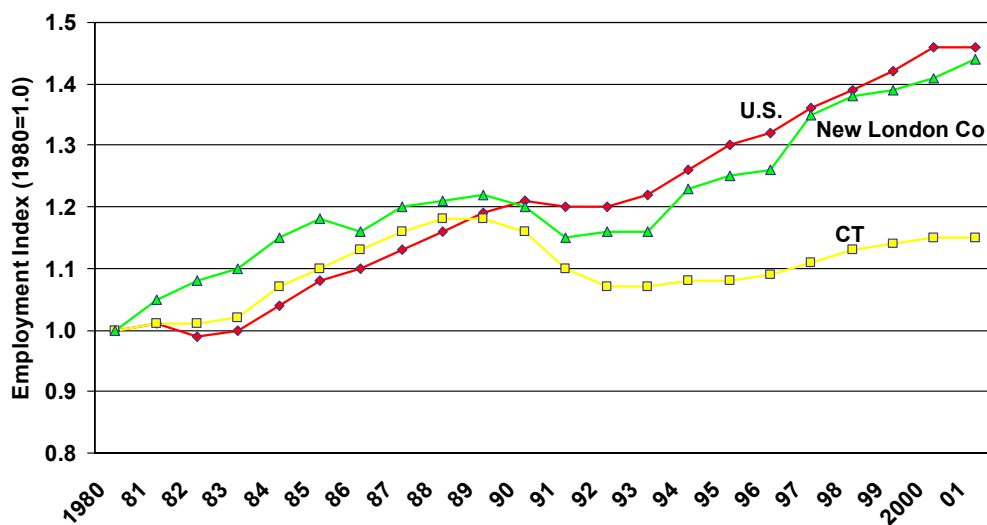
from 3 to 11 percent higher than SECT's. Estimates of population growth since the 2000 Census suggest that the populations of both SECT and Connecticut have been growing more rapidly recently. In fact, the estimated growth for the towns in SECT between 2000 and 2003 (5,200) already exceeds the growth observed in that region throughout the 1990s (4,130).

Much of the growth in population since the 1970s has been in the region's suburban and rural communities. Since 1970, the population in the three urban towns has declined at an annual average rate of -0.31 percent, while the population in the suburban towns continued to grow. Historically, the population of New London peaked in 1960 at 34,182, while Norwich's population peaked in 1970 at 41,739, and Groton's in 1990 at 45,144. Some of the recent data, however, suggest that these trends may also be changing — between 2000 and 2003, Groton and New London gained back slightly more than 1,100 of their population.

♦ *Overall, the region has experienced relatively rapid growth in jobs over the past decade.*

Between 1980 and 1989, as shown in Figure 2.1, employment growth in New London County surpassed both the nation and the state. The growth was fueled primarily by defense contracts, which peaked in 1989 and declined rapidly during the early 1990s. As a result of the change in defense contracts, coupled with a real estate/banking collapse and cyclical shock, employment in New London County decreased during the early 1990s, although not as sharply as the state.

Figure 2.1: Employment Growth



Sources: CT DOL and U.S. BLS

The growth path for the region and the state began diverging in 1992 with the opening of the first casino. Since 1992, growth in the county has been primarily due to growth of the Foxwoods casino, which opened in 1992, and the Mohegan Sun casino, which opened in 1997. Today, these two casinos, the tribal governments associated with them, and subsidiary operations employ more than 25,000 people. Compared to employment growth in Connecticut, New London County's growth has been quite brisk due to the advent of the casinos. In 2002,

employment in New London County was approximately 127,700, according to the Bureau of Labor Statistics.

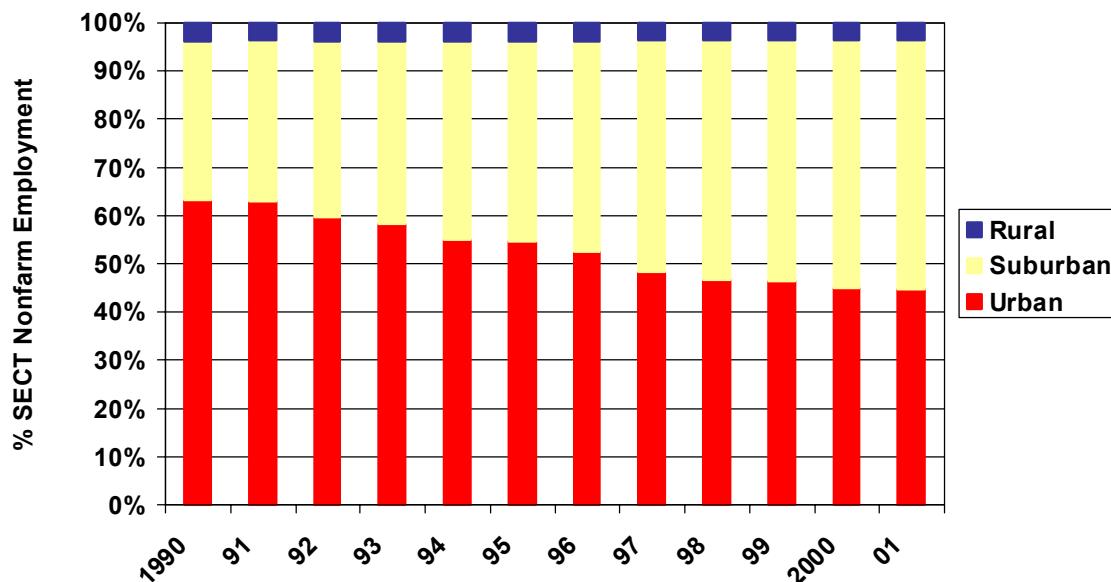
Job growth has been particularly strong since the end of the last recession. During most of the 1990s, job growth in New London County significantly exceeded job growth in Connecticut, and was also above the job growth experienced in the U.S. economy.

♦ ***Economic disparities are growing within the region.***

On almost every measure, there are significant differences between the economic performance of the suburban and rural communities in SECT and its urban centers. In the suburban and rural communities, job growth and incomes are higher, poverty rates and unemployment rates are much lower, and population is growing. In contrast, the population in poverty remains concentrated in Norwich and New London, both of which have double-digit poverty rates, basically unchanged over a 10-year period. These urban communities also have higher unemployment rates, have seen population declines, and have had limited job growth.

In terms of job growth, the share of New London County's employment located in the urban areas has declined from 62 percent in 1990 to 45 percent in 2001. Employment in the suburban areas has increased to almost 52 percent of the county's total.

Figure 2.2: Suburban Communities Garner a Larger Share of New Jobs

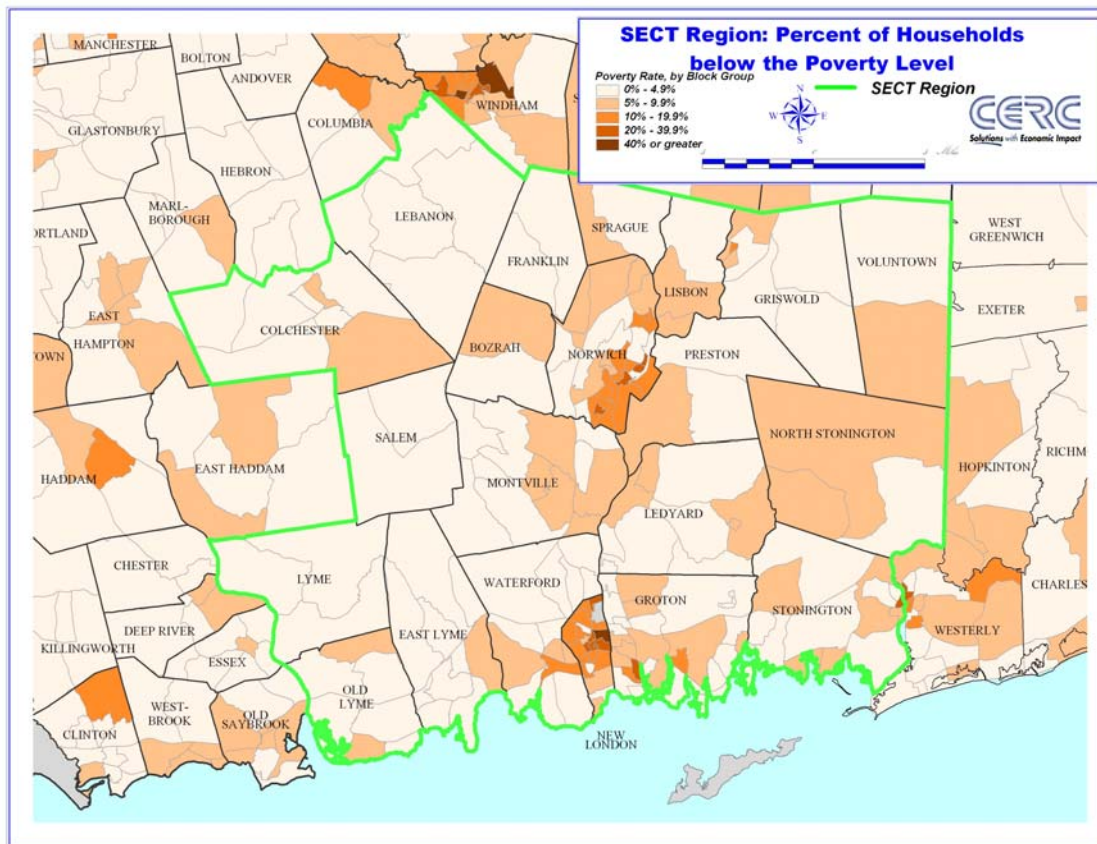


Source: CT DOL

Looking at median incomes, the towns with higher incomes in 1990 had higher growth than the towns with lower incomes. The median incomes for the towns with the lowest values in 1990, New London and Norwich, fell further behind the other towns. For example, New London's income increased only \$7,500, while Lyme had the highest increase of nearly \$27,500.

Similar trends are found in poverty statistics. While the overall poverty rate in SECT is below the U.S. average, New London has a higher share of the population in poverty than the U.S. It is also important to note that the share of the population in poverty for New London increased during the 1990s. Some of the other towns in the SECT region that had poverty rate increases include, most notably, Ledyard with an increase from 1.2 to 4 percent, North Stonington with an increase from 3.1 to 4.8 percent, and Groton with an increase from 4.5 to 6.1 percent. Old Lyme and Bozrah also had larger increases in the share of their populations in poverty than the one percent increase statewide.

Figure 2.3: Geographic Detail of Population in Poverty, 2000



Source: Census Bureau, 2000 Census

♦ *The population of the region has become more diverse.*

Overall, the population in the region is not very racially diverse. Only one town, New London, is more diverse than either the U.S. or Connecticut. New London's non-white population, at 36.5 percent of the total population, is nearly 12 percentage points higher than the U.S. average and 18.1 percentage points higher than Connecticut's. Overall, only 13 percent of SECT's population is non-white, and if New London were not included it would be only 10 percent non-white. Of the non-white population, about 40 percent is black, 15 percent is Asian, 7 percent is American Indian, and 14 percent is some other single race. Finally, nearly 21 percent of the non-white population in the SECT region considered themselves to be of more than one race.

While the region as a whole has not historically been racially diverse, there have been significant changes in the overall racial and ethnic composition of the population. For example, the Hispanic population of the SECT region grew by 57 percent during the 1990s. Interviews with community-based organizations throughout the region also provide strong anecdotal evidence that since the 2000 Census was taken there has been a very large migration of minorities into the region, most notably a large growth in the Asian population. This anecdotal information was confirmed when data on the school age population in the region were examined. Data from regional school districts provide evidence of an influx of minorities and non-English speaking students in many school districts since 2000. (See Table 2.1.)

Table 2.1: Increasing Diversity of Public School Students

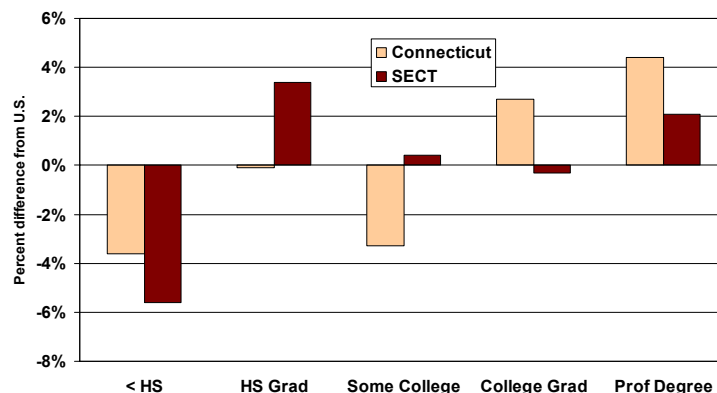
	District Type	# Public Schools	% K-12 Students Non-English Home Language		Total Minority		Minority % Enrollment		Bilingual or ESL, Number of Students	Bilingual or ESL, % of Students	ESL, % K-12 Receiving Services	# ESL (or Bilingual) Students	ESL % Enroll
			2002-2003	1998-1999	2002-2003	1997-1998	2002-2003	1997-1998	2001	2001	2001	2004	2004
Bozrah	Single Elementary School District	1	0.4	0.0	19	4	7.0	1.5					
Colchester	Colchester School District	4	0.7	2.0	224	120	6.9	4.5	0	0.0	0.1		
East Lyme	East Lyme School District	5	3.4	1.9	387	222	11.8	7.3	0	0.0	0.4		
Franklin	Single Elementary School District	1	0.0	1.6	14	10	6.1	5.3					
Griswold	Griswold School District	4	1.9	1.4	153	110	7.0	5.3	0	0.0	0.0		
Groton	Groton School District	14	4.0	2.7	1,546	1,284	27.0	21.9	22	0.4	1.5	150	2.5
Lebanon	Lebanon School District	3	0.6	0.4	47	29	3.1	2.0	0	0.0	0.2		
Ledyard	Ledyard School District	6	1.3	1.7	510	360	16.8	11.7	0	0.0	0.6		
Lisbon	Single Elementary School District	1	0.2	0.0	58	38	9.3	6.2					
Lyme													
Montville	Montville School District	6	2.4	1.7	425	290	14.5	10.1	0	0.0	0.5		
New London	New London School District	7	23.7	13.0	2,617	2,235	80.7	70.5	229	7.4	2.8	644	21.0
No Stonington	North Stonington School District	3	0.2	0.9	86	46	10.0	5.2	0	0.0	0.0		
Norwich	Norwich School District	13	4.4	7.3	1,508	1,059	37.3	26.4	0	0.0	2.6	256	6.0
Old Lyme													
Preston	Preston School District	4	1.4	0.8	41	31	7.9	6.2	0	0.0	0.0		
Salem	Single Elementary School District	1	0.5	0.2	30	15	4.9	2.9					
Sprague	Single Elementary School District	1	1.8	0.0	45	18	12.8	4.4					
Stonington	Stonington School District	6	0.5	2.9	228	82	9.3	3.6	0	0.0	0.3		
Voluntown	Single Elementary School District	1	0.0	0.0	17	4	5.0	1.1					
Waterford	Waterford School District	7	4.9	3.2	374	261	12.1	9.2	0	0.0	0.5		

Source: Connecticut Department of Education and interviews with three largest school districts.

♦ *The region's labor force is a potential source of competitive advantage.*

SECT's population in the 25- to 44-age cohort is above the U.S. average. The relative concentration of the SECT region's population in this age group reflects the presence of the submarine base. Education is another factor that contributes to a productive workforce. Figure 2.4 shows the state and regional differences from the U.S. educational attainment profile. Connecticut as a whole has a very high level of educational attainment. Although the SECT region generally reflects Connecticut's population in educational attainment, the region has a greater share of population with at least a high school degree than Connecticut or the U.S. The share of SECT's population with some college and the share with only a college degree are comparable to the U.S., but distinct from Connecticut's distribution with a concentration in the college degree cohort. The share of SECT's population with an advanced degree is slightly more than 2 percent above the U.S. average, but more than two percentage points below Connecticut's. However, those with advanced degrees increased one percentage point more in SECT than in the U.S. In summary, the educational attainment measures indicate that SECT's population has a better level of basic education than either Connecticut or the U.S. In addition, the educational attainment of SECT's population seems in many ways to have improved during the 1990s more than the U.S. or Connecticut, with a greater decline in those without high school degrees, and a greater increase in those with advanced degrees.

Figure 2.4: Difference from U.S. in Educational Attainment, 2000



Source: U.S. Census. All data based on population 25 or older.

♦ *The region is increasingly supplementing its labor pool by importing workers from outside the region.*

Labor force growth in New London County has lagged employment growth, leading to an influx of commuters from outside the region to fill jobs. For example, more than 9,000 Rhode Island residents and 2,000 residents from Hartford County commuted to jobs in the region in 2000. The increase in commuting is primarily due to the employment growth tied to casino development within SECT.

Figures 2.5 and 2.6 show the relevant commuting patterns for New London County. Overall, the number of New London County residents working in New London County decreased by about 3,500 between 1990 and 2000. Among other Connecticut and Rhode Island counties, Hartford County had the largest contingent of outbound New London County workers in both 1990 and 2000.











Figure 2.5: 1990 & 2000 Commuting Patterns for New London County Residents

Rank	1990			2000	
	Work County	New London County Residents		Work County	New London County Residents
	New London, CT	110,750		New London Co. CT	107,232
	Out of County	19,492		Out of County	22,321
1	Hartford, CT	6,359	→	Hartford Co. CT	7,093
2	Middlesex, CT	4,455	→	Middlesex Co. CT	4,909
3	Windham, CT	2,295	→	Windham Co. CT	3,181
4	Washington, RI	1,451	↘	New Haven Co. CT	1,638
5	New Haven, CT	1,317	↗	Washington Co. RI	1,410
6	Tolland, CT	1,192	→	Tolland Co. CT	1,001
7	Providence, RI	270	↘	Newport Co. RI	517
8	Fairfield, CT	256	↗	Fairfield Co. CT	411
9	New York, NY	135	↘	Providence Co. RI	309
10	Newport, RI	100	↗	Kent Co. RI	147
	Total Other Areas	1,662		Total Other Areas	1,705
	Litchfield CT	43		Litchfield CT	14
	Kent, RI	96		Bristol Co. RI	9
	All MA	397		All MA	440
	Other NY	223		All NY	446

Source: U.S. Census

The number of commuters from outside the county who work in New London County increased by 7,390 (20,565 to 27,955, or 36 percent) from 1990 to 2000. Windham County accounted for 2,578 of the increase in inbound commuters and Middlesex County accounted for an additional 1,242 commuters. Hartford County, which provided 2,068 commuting employees to New London County in 2000, had the highest increase of the Connecticut counties in percentage terms with a 76 percent increase. Overall, Rhode Island had an increase of 1,677 commuters to 9,071 for a 23 percent increase, and Massachusetts had a more than twofold increase, from 251 to 563.

Figure 2.6: Employees in New London County by County of Residence

Rank	1990			2000	
	Residence County	New London County Workers		Residence County	New London County Workers
	New London, CT	110,750		New London Co. CT	107,232
	Out of County	20,565		Out of County	27,955
1	Washington, RI	5,966		Windham Co. CT	8,188
2	Windham, CT	5,610		Washington Co. RI	6,941
3	Middlesex, CT	2,636		Middlesex Co. CT	3,878
4	Hartford, CT	1,176		Hartford Co. CT	2,068
5	New Haven, CT	1,045		Tolland Co. CT	1,486
6	Kent, RI	946		New Haven Co. CT	1,367
7	Tolland, CT	930		Kent Co. RI	1,067
8	Providence, RI	397		Providence Co. RI	865
9	Fairfield, CT	202		Fairfield Co. CT	247
10	Newport, RI	85		Newport Co. RI	179
	Total Other Areas	1,572		Total Other Areas	1,669
	Litchfield CT	25		Litchfield CT	46
				Bristol Co. RI	19
	Massachusetts	251		Massachusetts	563
	All NY	299		All NY	301

Regional Economy: Structure and Growth Scenarios

Economic Structure

A region's economic structure is comprised of the various industries that provide jobs in the region. An analysis of the structure provides insights into both economic challenges as well as economic strengths. Analysis of the changing structure of the regional economy led to the following key findings:

- ♦ ***SECT has seen an unusual shift in its economic structure over the past decade due to the decline in defense-related activities and the dramatic job growth in casinos.***

In 1990, SECT was one of the most defense dependent regions in the U.S. The Strategic Plan completed for the region in 1992 estimated that there were 36,000 employees, or 25 percent of the region's economic base, tied to defense. While defense remains a critical industry in the region, the establishment of the Foxwoods and Mohegan Sun casinos, starting in 1992, has led to well over 20,000 new jobs. These new jobs in casinos and related subsidiaries have been key in maintaining the region's economic viability over the past decade or more. Absent these jobs and the income they generated, the SECT economy would be significantly weaker and more vulnerable today due to the loss of manufacturing jobs primarily related to the defense industry. Few counties in the U.S. have seen this level of structural change during a 10-year period.

Table 2.2: Economic Structure of New London County

NAICS	Industry	New London Co Emp (1000s)		Growth (1000s)	
		1990	2002	# 90-02	% 90-02
71	Arts, Entertainment, & Recreation*	0.03	23.57	23.5	75943.4%
62	Health Care & Social Assistance	5.19	13.53	8.3	160.8%
72	Accommodation & Food Svcs	5.78	10.43	4.7	80.6%
44-45	Retail Trade	10.70	14.28	3.6	33.5%
54	Professional, Scientific, & Technical Svcs	3.48	5.86	2.4	68.4%
81	Other Svcs (except Public Administration)	1.24	3.13	1.9	152.6%
61	Educational Svcs	0.40	2.16	1.8	439.6%
56	Admin, Support, Waste Mgmt & Remediation	1.81	3.56	1.7	96.5%
23	Construction	2.80	3.93	1.1	40.0%
48-49	Transportation & Warehousing	1.60	2.27	0.7	41.9%
51	Information	1.43	2.00	0.6	40.0%
22	Utilities	1.09	1.61	0.5	47.1%
55	Management of Companies & Enterprises	0.32	0.56	0.2	72.3%
42	Wholesale Trade	1.67	1.88	0.2	12.2%
53	Real Estate & Rental & Leasing	0.60	0.62	0.0	2.0%
21	Mining	0.10	0.07	0.0	-26.3%
52	Finance & Insurance	2.23	2.04	-0.2	-8.6%
GV	Government**	19.50	17.80	-1.7	-8.7%
31-33	Manufacturing***	28.00	17.11	-10.9	-38.9%

* Includes estimates for casino-hotels.

** Does not include Indian casino-hotel employment.

*** Adjusted based on BLS and CBP estimates.

♦ ***SECT remains extremely dependent on a handful of large employers.***

While SECT's economy is now more diverse than it was in the 1980s, the region remains highly dependent on a handful of very large employers. The largest five employers accounted for 36 percent of total employment in the county in 2002. These numbers do not include the large number of jobs with contractors and subcontractors that are located in SECT due to these five major employers.

Top Five Employers in New London County	
Employer	# of Employees
Foxwoods Casino Resort	11,000
U.S. Naval Submarine Base	10,500
Mohegan Sun Casino	10,000
Electric Boat Corporation	8,800
Pfizer Corporation	6,000**
Total	46,300
Source: Economy.com 2004	
** This includes contract employees	

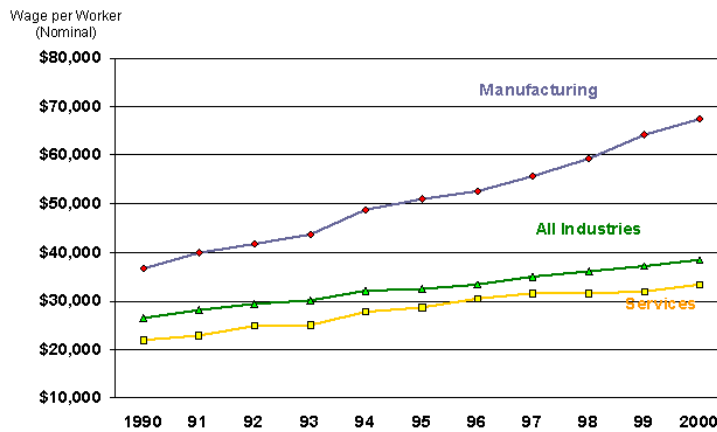
♦ ***Remaining manufacturing employment in the region continues to be vulnerable to further declines.***

From a peak of 28,000 jobs in 1990, employment in manufacturing had declined by about 11,000 jobs by 2002 to a total of 17,000. Together, Electric Boat and Pfizer represent more than three-quarters of the region's manufacturing base. The balance of manufacturing employment is scattered across dozens of industries. The third largest industry, after shipbuilding and pharmaceuticals, is machinery manufacturing with employment estimated at one-tenth of either of these two industries.

Figure 2.7

In addition to the global shifts in manufacturing that are leaving no corner of the nation undisturbed, the SECT region also must contend with a highly concentrated manufacturing base facing various pressures. The current round of base closings could have a dramatic effect on local employment should the Subase close and Electric Boat relocate to be closer to its customer base. Moreover, recent reports about a Navy study that has proposed a significant reduction in the attack

SECT Region Wages per Worker in Manufacturing, Services and Average for all Industries, 1990-2000



Source: U.S. Bureau of Economic Analysis

submarine force focused attention on the continued vulnerability of the region to job losses at Electric Boat, the most significant manufacturing company in the region. At the same time, the growing trend towards outsourcing may impact the local R&D activity in pharmaceuticals as clinical trials and other specialized activities are being located abroad.

There is a fair amount of downside risk for the local manufacturing base, particularly in those industries that comprise the bulk of activity. The degree of specialization in these two manufacturing industries will be problematic for the region should either go through significant restructuring. The loss of more high paying manufacturing jobs will have significant local impacts.

♦ ***The shift in the economic structure has resulted in a wide swing of jobs from high-paying to low-paying industries.***

As a result of a job shift from higher-paying to lower-paying industries over the past 10 to 15 years, there have been some unsettling changes in the region. Foremost among these is the loss of almost 11,000 manufacturing jobs with an annual average wage of \$67,000 (2000 average). At the same time, employment in the services sector has increased by more than 27,000, with an annual average wage of about \$33,000. The wage disparities are quite apparent — it takes a little more than two service sector jobs, on average, to equal the wage of a single manufacturing job. This trend does not bode well for the region and the state, and presents significant challenges for regional economic development efforts.

Industry Clusters

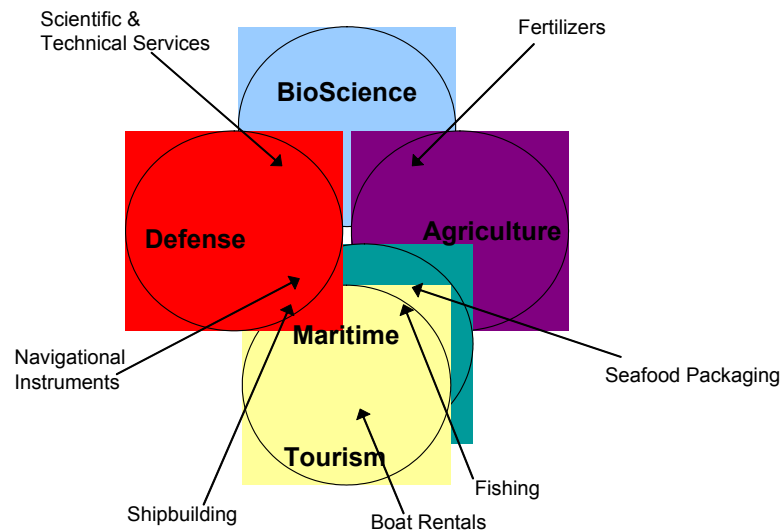
The competitive interaction among local firms within an industry group for ideas, labor resources, and markets can provide the region with a dynamic economic concentration of firms in an industry cluster. The value to the region of strong industry clusters has been well documented in the industry cluster literature. Clusters often result from local economic characteristics that can include natural resources, specific local labor force skill sets, specialized knowledge in the financial sector, access to markets for either inputs or outputs, or other unique local factors.

The SECT region has identified six industry groups or clusters that are important to the regional economy. They include:

- the bioscience and chemicals industry;
- defense-related industry;
- maritime-related industries;
- tourism industries;
- creative industries; and
- agriculture-related industries

It is important to note that an economy is a complex system and seldom do industry clusters exist as discrete silos in the regional economy. Thus, when examining the SECT industry clusters, it is not surprising to find that some industries are included in more than one cluster. Figure 2.8 conceptually presents some of the potential crossover industries. For example the output from and employment in the shipbuilding industry is included in both defense and maritime clusters.

Figure 2.8: Industries within a Region Serve Multiple Clusters



Detailed employment and economic data on each of the clusters are provided in Appendix A. What follows is a more qualitative overview of the key clusters in the region.

Bioscience Cluster

While there is considerable interest in the state of Connecticut in developing its bioscience cluster, much of that activity remains centered in the New Haven region. However, a significant part of the state's cluster is located in SECT, primarily in one large firm — Pfizer. Thus, while bioscience is not really an industry cluster in the region at all, but a concentration of employment in one firm, the region remains an important part of the state's bioscience cluster efforts.

Pfizer built its first R&D facility in the region in Groton in 1959. It has a manufacturing facility located in Groton that does manufacturing process design as well as the formulation of active ingredients for several drugs in production. It is one of about 60 to 70 manufacturing facilities operated by the company. More recently, Pfizer built its global headquarters for R&D in New London. The New London facility manages all of the R&D at the company as well as the clinical trials and the data processing for trials. The company has most recently built a new facility in New Haven, which will be for conducting Phase I clinical trials.

Currently, the company has about 6,000 employees in the region, as well as over 1,000 contract employees who provide services such as security, food service, maintenance, and graphic design. A large percentage of these employees are staff with a scientific background and at least a Bachelors Degree. Pfizer faces some recruiting challenges when competing with other large pharmaceutical companies located in Boston, New Jersey, or California. The lack of job opportunities in the region for spouses is of particular concern.

Clearly, the future of Pfizer in Connecticut is of extreme importance to SECT. Further strengthening of this cluster within the state could provide additional opportunities for business development in the SECT region.

Defense Cluster

The Navy Submarine (Subase) and Electric Boat's Nuclear Submarine manufacturing facilities are the most significant parts of the defense cluster in the region. Electric Boat still employs an estimated 8,800 people (down from over 20,000 in the 1980s) and the Navy has 10,000 servicemen and women and civilian employees and contractors. Electric Boat is the largest shipbuilding operation in the state by a huge margin and is one of the top six shipbuilding operations in the nation. While the dependence of the region on this defense-related activity has diminished significantly over the last decade, Electric Boat and the Navy remain of critical importance to the local economy.

Looking ahead, there is still uncertainty regarding the role of the Navy and Electric Boat in New London County. There is another round of base closings to be announced in late 2005 and the Subase is going to be examined. Additionally, Electric Boat is not building submarines at the same rate as it had in the past, while the construction that is occurring is being shared with

facilities in Virginia and Rhode Island. Recent reports that the Navy is considering reducing its attack submarine fleet brought attention to the possibility of future job losses at Electric Boat. Moreover, it is far from certain that Electric Boat would continue to operate in the area if the Navy closed its Groton base. Retaining the Navy Subbase and the Electric Boat operations should continue to be a top priority for the region.

In addition to the Navy and Electric Boat operations, there are defense-related businesses in the area. One such company is Ship Analytics, owned by L3 (one of the largest defense contractors in the U.S.) and based in North Stonington. It produces a variety of products related to simulations of complex marine events (such as oil spills) and manufactures simulators to enable training for such situations as well as day-to-day operations of complex marine vehicles. Another defense-related subcontractor is McLaughlin Research. This firm, with operations in New London, provides engineering and research to support torpedo design and launching systems. Sonalysts is based in Waterford and provides sonar-related software development services to the Navy. DDL Omni Engineering has an office in Waterford and performs engineering work from that location for Navy submarine contracts. There are a number of other marine defense-related contractors in the area.

There are other service activities associated with the Navy operations. Perhaps most significant are the subcontracted basic base management and maintenance tasks. Services like housing and cooking are predominantly outsourced today and thus provide jobs to local civilian workers. A recently announced Public-Private-Venture (PPV) to privatize the ownership/operation of approximately 2,100 Navy housing units in Groton is expected to be under contract in late 2004. There are also in-water activities that are associated with serving the military. When subs move in and out of port they require tugboats to help maneuver. There is also a need for dredging to ensure the sub piers remain accessible from the Sound.

The Coast Guard Academy can also be put into the category of defense-related activities. The importance of the Coast Guard and the Academy has increased in recent years as terrorist threats have become of greater concern to our nation. While smaller than the other service academies, the Coast Guard is still very selective. The Academy employs approximately 900 people. Currently, there are no plans to expand the Coast Guard activities in New London, but it is highly unlikely that there will be any reduction in activity either. At the end of January 2004, it was announced that \$10 million in local construction and repair contracts were awarded to Connecticut firms for work to be done on the Coast Guard Academy campus.

In addition to the Academy, the Coast Guard operates its Research and Development Center at Avery Point. The Guard's sole R&D center, its research focuses developing technologies to: aid in detection, interdiction, and prosecution of drug smugglers; remove oil spills from water; improve the safety of maritime navigation; improve the alertness and performance of ships' crews; and eliminate invasive species from ship ballast water.

To help protect the interests of the local area in response to further danger of closing the Groton Subbase and to protect the largest part of the maritime economy in the county, the SUBASE Realignment Coalition has been reformed. This group has been meeting with key

people to develop a strategy to maintain the Navy's presence in the area before and after the 2005 decisions are made on base closings.

Maritime Cluster

The maritime cluster in SECT overlaps with many of the other clusters. We have defined this cluster to include all of the economic activities that are tied to the region's location on Long Island Sound. As noted, it is the region's historic ties to the sea that have been the foundation of its economic base for hundreds of years.

The maritime cluster includes the activities of the U.S. Navy Submarine Base at Groton, maritime education and research at the UConn Marine Sciences and Technology Center at Avery Point, the U.S. Coast Guard Academy and installations, Mystic Aquarium and Institute for Exploration, and Mystic Seaport: the Museum of America and the Sea. Cruise ship support activities include docking of American Cruise Lines, Clipper Cruise Lines, and Holland America Lines. Also included in the maritime cluster are manufacturers of maritime products including Electric Boat, sail makers, and maritime instruments. Some of the other maritime-related activities include the region's marinas, fishing boats, and ferries.

Maritime-related Transportation

There are two elements of this component of the cluster, passenger ferry services and cargo services. In terms of waterborne transportation, New London is the home of Cross Sound Ferry whose vessels and the majority of the support activities for its operations are based in New London. In terms of cargo services, the State Pier was renovated in the 1990s and is managed by Logistec under a contract that runs through 2008. The primary cargo moving through the port is lumber.

Maritime-related Tourism

- ***Attractions:*** Many of the tourist activities in SECT are maritime-related. A few of the leading attractions in the area are the Mystic Seaport, Mystic Aquarium, and the Nautilus Museum. The Mystic Seaport is the nation's leading maritime museum and its opening marked the establishment of the tourist economy in the region. The Mystic Aquarium receives 800,000 to 900,000 visitors annually. Mystic is an important anchor and brand for a large portion of the non-casino tourism that enters the area.
- ***Cruises:*** In 2004, for the first time, the Holland America Lines ship *M/S Maasdam* will be docking in New London in May and October 2004. The ship has a capacity of 1,266 passengers. Passengers will have the opportunity to come ashore for the day and experience what New London has to offer. Estimates are that cruise line passengers spend an average of \$150 during a port visit, meaning that each cruise ship day in port has the potential to bring in almost \$200,000 in tourist spending to the local economy. The potential spending increases if New London is an embarkation port for a major cruise vessel. This is a longer-term goal for the local economy. The Connecticut Cruise Ship Task Force (the successor organization to the Port of New London Cruise Ship Commission) is working to promote New London as port of call for cruise ships and to

address infrastructure and logistical issues. The recently established Connecticut Cruise Industry Association supports its efforts. In addition to the large cruise ships, a small cruise ship operator, American Cruise Lines, located in nearby Haddam, operates cruises to Florida and the south in the winter. During the summer, it runs 8 day/7 night cruises to the islands of New England (Block Island, Martha's Vineyard, Nantucket, Newport, etc.) and during the fall it operates Hudson River cruises. Its port of departure and return for the summer and fall trips is New London. It runs approximately 34 cruises a year out of New London.

- ***Recreational Boating:*** In addition to the cruise ships, there are numerous pleasure boaters who independently sail and power up and down the New England coast each summer. There are several ports along the New London County shore that are attractive to these travelers. Oftentimes, these people do not spend a lot of money in port, bringing their own accommodations and food with them. They do support the local marinas if they need fuel, repair services, moorings, or launch services. There is the opportunity to cater to these tourists with attractions that are easy to access from the sea. A boating website lists 30 marinas and boatyards along the shore of Long Island Sound in New London County. According to 2001 data in County Business Patterns, there were 25 marinas in New London County employing 175 people. While these help support the tourist activities of transient boaters, the majority of their business is local. They provide care for residents' boats year round, from out of water storage during the winter to a place to dock or moorings with launch service in the summer months. In addition to the marinas and boatyards, there is a variety of other support services for the local boating community and beyond.
- ***Festivals:*** Maritime-related tourism could be further encouraged through the planning and development of large events. OpSail 2000, which brought in a large influx of ships and tourists, is an example of such an event. Creative planning and organizing of large events can build the brand of the region and continue to attract tourists with an interest in the sea.
- ***Marine Product Manufacturers and Distributors:*** There are a few companies in the region involved in the manufacture and distribution of marine products. Halsey Lidgard and Farrar sail makers represent two of the former, and the latter includes Defender Industries based in Waterford, which claims to have the largest supply of marine goods in the world, and Kellogg Marine, based in Old Lyme.
- ***Commercial Fishing:*** According to the 2001 non-employee business statistics, there were 161 individuals engaged in commercial fishing in New London County with total gross receipts from operations of \$6,591,000 (an average of \$41,000 each, indicating that many are engaged in fishing full-time). This type of activity makes up the bulk of fishing activity in New London County, as there are only five firms listed in the 2000 survey of County Business Patterns, each with less than five employees.
- ***Aquaculture:*** There is a modest amount of aquaculture activity in New London County. A 1998 Federal Census of Aquaculture showed that there were 23 operations in Connecticut, but there were not enough data to break that figure down by county. More recent estimates are that \$11 million worth of shellfish was harvested from aquaculture

farms in Long Island Sound¹ (there is a very large farm off Fairfield County). The Mohegan Tribe has begun investing in shellfish aquaculture in the Long Island Sound, but, according to the tribe, it is not planned to be a significant business activity. Its operations have been approved by the Coast Guard and local governments, but not without some opposition from people concerned that aquaculture will interfere with recreational activities in the Sound.

- ***Marine-related research and development activities:*** A number of institutions in the region are conducting marine-related R&D, many of which are located at the University of Connecticut Marine Sciences and Technology Center at Avery Point.
 - UConn's *Marine Sciences Program* offers undergraduate and graduate-level programs in various disciplines in the marine sciences. The program supports a variety of scientific research by faculty and students, with a focus on marine ecology.
 - UConn also operates the research platform, *Connecticut*, a 76-foot research vessel equipped with a variety of scientific equipment and lab space. This vessel is used by the school as well as by other institutions requiring a platform for marine science activity. The ship is able to work in coastal waters or on the continental shelf on cruises up to 10 days long. The ship is rented out to institutions such as the Coast Guard, the Department of Environmental Protection, or the Woods Hole Oceanographic Institute. Based on the variety of users of this vessel, it appears to be a special asset to the local research community. UConn also has a number of smaller research boats.
 - The *Connecticut Sea Grant College Program*, operated by UConn and located at the Avery Point campus, supports a broad range of applied research, education, and extension activities aimed at improving understanding, assessment, use, management, conservation, and restoration of marine and coastal resources. UConn, the state of Connecticut, and the National Oceanic and Atmospheric Administration (NOAA) jointly fund it.
 - The *National Undersea Research Center-North Atlantic and Great Lakes*, co-located with UConn at Avery Point, is one of six regional centers established and funded by NOAA to support research and education using advanced underwater technologies such as occupied submersibles, robotic vehicles, and mixed-gas diving. It has a remotely operated vehicle research platform that can be run from the research vessel *Connecticut*. It also has a decompression chamber that allows humans to perform deep-sea dives.
 - The *Institute for Exploration (IFE)* at the Mystic Aquarium, part of the Sea Research Foundation, is a nonprofit organization specializing in deep-sea research and ocean exploration under the direction of Dr. Robert Ballard. The Institute is pioneering the emerging discipline of deep-sea archaeology and has also become a leader in developing new deep submergence technologies. It has recently developed a unique new collection of underwater vehicles dedicated to marine archaeology surveying. With funding support from NOAA, the Office of Naval Research, and the National

¹ Others figures have quoted a figure of \$60+ million. It is unclear why the large discrepancy.

Geographic Society, IFE has engineered systems designed to operate up to a maximum depth of 3,000 meters, or about 1.8 miles.

- The *Ocean Technology Foundation* (OTF) is an undersea research and education service organization based at Avery Point. Research focuses on understanding the marine ecosystem and preservation of marine resources. OTF seeks to facilitate participation and collaboration among commercial, educational, research, and governmental interests.
- The U.S. Coast Guard Research and Development Center, described above.

Tourism Cluster

The two most significant components of the tourism cluster in SECT are the maritime-related tourism activities discussed above and the two major casinos (Foxwoods and Mohegan Sun) that have been established and expanded in the region over the past decade. Together, the maritime-related tourism activities and casino activities have combined to make tourism the dominant cluster in SECT.

A very conservative estimate of the tourism cluster, led by the casinos, has total sales of more than \$3.7 billion and employment of more than 28,000. However, data from 2001 do not reflect some of the expansion activities of the casinos. It is probable that total employment in tourism-related activities exceeds 30,000.

Figure 2.9: SECT Industry Profiles for the Tourism Cluster, 2001

Industry Code	Description	Sales (\$ mil)	Employment	Employment Compensation (\$ mil)
	Total*	\$3,757.6	28,202	\$532.29
479	Hotels and motels, including casino hotels*	\$3,425.0	22,785	\$434.61
481	Food services and drinking places	\$70.6	1,748	\$22.84
478	Other amusement, gambling, and recreation industries	\$62.3	533	\$17.57
475	Museums, historical sites, zoos, and parks	\$40.4	526	\$16.60
480	Other accommodations	\$28.1	200	\$2.93
432	Automotive equipment rental and leasing	\$23.1	159	\$4.00
471	Performing arts companies	\$22.9	836	\$10.24
393	Water transportation	\$18.7	30	\$2.00
472	Spectator sports	\$17.3	785	\$8.96
473	Independent artists, writers, and performers	\$16.6	116	\$4.77
456	Travel arrangement and reservation services	\$11.8	200	\$3.66
474	Promoters of performing arts and sports and agents for pu	\$8.4	200	\$2.37
87	Wineries	\$7.0	29	\$0.49
391	Air transportation	\$4.9	30	\$1.20
16	Fishing	\$0.5	24	\$0.06

Source: IMPLAN, 2001.

* Note that Sales in the 479, Hotels ... including casinos has been adjusted, \$2.0 billion

An additional component of the tourism cluster not reflected in these figures is the more than 5,600 homes in the SECT region classified in the 2000 Census data as seasonal, recreational, or occasional use — basically vacation homes. This represents 5.6 percent of the total housing stock in the region. Old Lyme, Salem, Lebanon, East Lyme, Lyme, and Voluntown all had more

than 10 percent of their housing stock classified as seasonal. Assuming that these vacation homes are occupied 75 percent of the time between Memorial Day and Labor Day, one can estimate that there are more than 54,000 occupancy-weeks, and each occupancy-week has a rental value of \$1,000. In addition, estimated local expenditures for food, gas, entertainment, and related purchases are \$400. Using these estimates, the total direct economic impact of vacation homes is more than \$75 million annually.

Creative Cluster

While arts and cultural activities are a core asset of the region (see description in Chapter III), the individual artists, nonprofit cultural institutions, and commercial enterprises that are tied to creativity are also an important economic cluster in the region, providing both jobs and income for residents throughout SECT. The full potential of this economic activity has yet to be fully realized, but there is growing recognition that the region's "creative cluster" can be an economic engine in itself.

It is difficult to get a full picture of the region's creative cluster. Some of the activities in the cluster overlap with the tourism industry (i.e., the museums, historic sites, and galleries). In addition, much of the economic activity in the industry is associated with the income of individual artists and performers who most often work many jobs to make a living. In addition, with the development of the Mashantucket Pequot Museum and Research Center and the many venues at the casinos that bring in top talent, there are many jobs in the gaming industry that could be categorized as "creative" in nature.

While a complete analysis of the creative cluster was not possible, at the minimum it includes:

- 667 jobs in publishing-related activities;
- 135 in film and sound production;
- 124 jobs related to media;
- 1,900 jobs in arts, entertainment, and recreation;
- 1,000 self-employed individuals in "creative" occupations including artists, performers, architects, photographers, and graphic artists;
- arts and cultural jobs at colleges and universities in the region;
- arts and cultural jobs related to the casinos.

What is often lost in discussions about employment in the creative cluster are businesses that are producing or distributing creative products. The region has some relevant resources, particularly in the area of arts and technology. These include:

- Sonalysts is a technology-based defense company that has diversified into the entertainment industry. Sonalyst Studios is a full-service production facility comprising: the film, television, audio, design, and animation production media center; Power Station New England recording studio; New England's largest and quietest sound stages; and a

set and exhibit fabrication facility. Sonalysts also produces award-winning interactive computer games.

- The Ammerman Center for Arts and Technology at Connecticut College is focused on linking faculty, students, and corporate partners to develop uses of new technologies in artistic endeavors and to apply artistic techniques to understanding scientific and medical data.

These two resources could be further developed to promote the region's strength in areas of intersection between technology and art.

Agriculture Cluster

Many of the communities within southeastern Connecticut are still largely rural and many continue to have economic activities related to agriculture. While the scale of agricultural production is small, this cluster is important to the region's economic diversity as well as providing for a diversity of land uses.

Data on the cluster show that currently there are less than 3,000 individuals employed in the agricultural cluster.

Figure 2.10: SECT Industry Profiles for the Agriculture Cluster, 2001

Industry Code	Description	Sales (\$ mil)	Employment	Employment Compensation (\$ mil)
	Total	\$171.7	2,623	\$43.70
6	Greenhouse and nursery production	\$54.3	486	\$22.17
12	Poultry and egg production	\$33.5	222	\$5.03
11	Cattle ranching and farming	\$17.0	682	\$4.02
390	Wholesale trade	\$16.3	120	\$5.99
10	All other crop farming	\$16.2	352	\$1.67
14	Logging	\$10.0	148	\$0.26
87	Wineries	\$7.0	29	\$0.49
13	Animal production, except cattle and poultry and eggs	\$6.4	251	\$1.78
16	Fishing	\$2.5	122	\$0.31
3	Vegetable and melon farming	\$2.4	29	\$0.55
18	Agriculture and forestry support activities	\$2.0	128	\$0.56
5	Fruit farming	\$1.8	23	\$0.62
158	Fertilizer, mixing only, manufacturing	\$1.0	3	\$0.04
	Other Industries	\$0.8	13	\$0.1

Source: IMPLAN, 2001.

The data provide only a limited picture of the agricultural cluster in the region. In terms of land use, as of 1997 there were 67,924 acres dedicated to agriculture in New London County. This was distributed across 311 full-time farms and 299 part-time farms. The average size of all farms, including part-time farms, was 111 acres. Crop sales were 44 percent and livestock sales were 56 percent.

The components of the agricultural cluster that are relatively strong in SECT are:

- **Dairy farming.** In 1997, there were 89 farms with milk cows that had a total of 5,616 head of cattle. This was down from 101 farms in 1992.

- **Poultry.** In 1997, there were 75 farms with chickens that lay eggs. This is up from 54 in 1992.
- **Mushrooms.** The region is home to Franklin Farms, the nation's largest grower and harvester of certified organic mushrooms. The company is one of the largest agricultural employers in New England, with total employment of about 600 people. It makes veggie burgers, indicating that it is actively involved in food processing and is not just a farming operation.
- **Wineries.** The region has a number of wineries including Stonington Vineyards in Stonington, Jonathan Edwards Winery in North Stonington, Heritage Trail Vineyards in Lisbon, and Priam Vineyards in Colchester. The three-generation Clyde's Cider Mill has recently begun production of fruit wines and spirits. There are a few other wineries located nearby in Pomfret, and Clinton. These wineries are part of the Connecticut Wine Trail and contribute to the region's tourism economy as well as its agricultural economy. Some of the wineries also are part of the Coastal Wine Group, which includes vineyards in Rhode Island and Massachusetts.

The agricultural sector in general is facing increasing pressures due primarily to the high land costs in the region. The pressure for growth is pushing up land prices and creating demand for agricultural land. The challenge for the region is to identify agricultural uses where the value of the use can justify the land costs. Within Connecticut, the two major areas that meet this criterion are wineries and horticultural uses.

The Future of the Regional Economy: Potential Scenarios

Scenario analysis is a commonly used method of visualizing and planning for future directions given certain conditions or developments. This type of analysis basically involves addressing one or more "what if" questions. (Appendix A)

In the current case, we have been asked to examine the following set of questions:

1. *What if* the Groton Subbase were to close as a result of the 2005 round of base closures? What would the impact be on citizens and business in the area? What would the impact be on state and local tax revenues? Would EB leave in the event of a base closure? If so, what would these impacts be? What is the cumulative effect of the loss of both the military base as well as the shipyard?
2. *What if* overall growth trends were to maintain their current moderate pace, and the region continued to experience the movement of jobs and population from its urban centers to the suburban communities?
3. *What if* a third casino were to be built in the region? In Rhode Island? What if two or more of these come to pass? How would this impact the labor market? Continued success of existing casinos?

4. *What if* traffic volume continues to grow as it has over the past decade? What is the impact on business and residents? How might it impact the quality of life? Are the major arteries operating above planned capacity?
5. *What if* a major tourism/mixed-use development occurred at the site of the former Norwich Hospital? What are the implications for traffic volume? Labor availability? Housing affordability and availability? Demand for public services?

In reality, these are not necessarily discrete phenomena but rather a series of interdependent events and outcomes. For example, the introduction of a third casino in the SECT region would increase traffic volume locally, whereas a casino developed elsewhere might actually have a slight negative effect on local volume. Similarly, continued modest growth has traffic implications, as would the closure of the Subbase. Although we acknowledge these interdependencies, for purposes of clarity we will discuss each scenario separately since the number of permutations is extensive. The purpose of postulating these scenarios was to stimulate thoughtful analysis and discourse regarding potential major economic events that could have significant strategic affect upon the regional economy.

Sub Base Closing

The 2005 round of the Base Closure and Realignment Commission (BRAC) will be examining every U.S. military installation with the goal of closing a significant number, both domestic and foreign. The challenge for this commission, as in the past, is to achieve cost reduction savings without sacrificing national security. The U.S. Naval Submarine base (Subbase) New London and the region have been through the BRAC process before and, in each instance, have been able to successfully make the case for continued operations, especially in light of its strategic location. The CEDS team, however, is not taking anything for granted in this round of closings and has begun to prepare a defense strategy. Central to this effort is a detailed understanding of the costs and consequences of a base closure — one of the five scenarios under examination. Pending receipt of actual payroll and employment data from the military base and EB's Groton facility, we have estimated the economic impact of the jobs and income that would be lost if (a) the sub base were to be closed, and if (b) EB were to shut down given the loss of its largest customer. Not surprisingly, the repercussions of such events would be quite severe and long lasting. Our analysis suggests that if both the base and the shipyard were to close, local impacts in New London would include:

- The direct loss of \$1.75 billion in industry sales. Secondary and tertiary effects could bring the total as high as \$2.4 billion.
- The loss of more than 15,000 jobs directly related to these two shocks, and as many as another 8,000 due to the ripple effect.
- Total value-added, or gross regional product, would fall by \$1.3 billion or about 15 percent.
- Personal income drops by \$900 million as a direct result, and more than \$200 million in indirect effects.

As these data illustrate, these impacts would be catastrophic and, if they were to occur, it would undoubtedly take decades for the region to recover. There may, however, be some slight

positive effects as well, none of which would be anywhere near large enough to offset the negative. Losses of this magnitude would result in population losses as people leave to look for opportunities elsewhere. This population loss would reduce traffic congestion and pressures on housing. It would also reduce demand for public services, particularly education, but grand list shrinkage may offset this. The bottom line is that the loss of these two facilities would have a significant negative impact on the region, offset only slightly by some positive outcomes.

Growth Scenarios

Using economic and demographic growth and shifts over the past decade as a base, trends were extrapolated into the future to develop some estimates of what one might expect to see by the close of this decade.

- The SECT region has been fundamentally reshaped by the advent of the two Indian casinos. Absent the casinos, New London County today would most likely be one of the slowest growing areas in the state. The 25,000-plus jobs represented by Indian gaming and related activities have been the source of almost all job growth over the past 12 years — for both the state and the region.
- If job growth returns to its 30-year trend over the rest of this decade, one might expect to see net new jobs in the region in the 7,500-10,000 range. If a new casino, or similar venue of equal size and draw, were to develop in the county, job growth could be as high as 20,000.
- Absent any interventions or policy shifts, the shift of jobs and population from urban to suburban towns will continue apace. By 2010, the three urban communities will contain about 30 percent of the region's jobs, down from 60 percent in 1990. Suburban communities have been the recipients of these jobs and by 2010 could account for two-thirds of the region's jobs.
- Total population in New London County could be expected to increase between 5,000 and 12,000 by 2010, contingent on overall economic growth and the introduction of a third casino or similar-sized venue.
- As with jobs, if past shifts continue one might reasonably expect to see up to 78 percent of population growth occurring in suburban towns, while population in the three urban communities continues its slow to negative growth.

These types of shifts will continue to exacerbate urban-suburban disparities, increase growth pressures on suburban rural communities and, in general, will be the antithesis of smart growth.

New Casino Development

The possibility of a new casino or casinos being developed in the area seems to be increasing daily based on recent stories in the media. The Narragansett Tribe is the midst of its fifth attempt to set up an Indian casino in West Warwick, Rhode Island, less than 50 miles from Foxwoods and Mohegan Sun. With its recent recognition by the federal government, the Schaghticoke Tribe is in a position to begin to lobby for the development of a third Casino in

Connecticut, presumably somewhere in Fairfield County. There has also been some recent speculation about a third casino in New London County.

The potential impact of a new casino will be a function of its size and location relative to the two existing casinos. A new casino in New London County may well prove to have an agglomerative effect — that is, it would pull more visitors into the region than the other two currently do without adversely impacting their operations. Conversely, if the proposed casino in Rhode Island were to become a reality, one might expect that it would draw off some proportion of visitors from Rhode Island and southeastern Massachusetts.

The model suggests that the introduction of a new casino in western Connecticut could impact the revenues of the two casinos currently in the SECT region by 31 percent. An important assumption to consider is that the model assumes that the existing casinos do not change their marketing campaigns or pricing structures. Any proactive change in these areas by the existing casinos would mitigate the impact on them from the introduction of a new casino in the region.

The 31 percent reduction is due in part to the estimates of the percentage of visitors from New York who would be expected to go to the closer facility in Fairfield County rather than drive on through to the casinos in New London County. Specifically, the model estimated slightly over 60 percent the visitors and spending from New York that currently goes to the two existing casinos would be captured by the introduction of a new casino in Fairfield County. In addition, because the model's demographics are county-based, a relatively large share of the population and expenditures in Fairfield County that currently go to the existing casinos would go to the closer casino within the county.

A new casino in the region, comparable in size to Foxwoods or Mohegan Sun, would have pronounced and immediate effects on the region. Chief among these would be a sharp increase in traffic on the arterials that would feed a third site. The competition for workers would become increasingly intense, possibly leading to a migration of new workers and families and a concomitant increase in demand for public services, (e.g., education, public safety, etc). Given the frequency with which proposals for new casinos are arising, and the tough fiscal conditions of surrounding states, it is probably only a matter of time before competing venues appear.

Traffic Volume

Due in no small part to the two new casinos, traffic in New London County had grown at a steady rate since 1990, the earliest year for which data are available. Currently I-95 is operating at above planned capacity and, if these trends continue, it will be 30 percent above capacity in 2010 and 54 percent above capacity by 2025. Congestion frequency generally increases as traffic volume exceeds planned capacity. Significant seasonal variations were noted with winter tending to be the lowest, while counts on I-95 peak annually in August. During August 2003, the average traffic count on Saturdays approached 200 percent of planned capacity. At these levels, it does not take much of a problem to create multiple and prolonged traffic jams.

As traffic continues to grow, and absent any increase in capacity, it is reasonable to expect congestion frequency and severity will increase steadily. And, as the traffic situation steadily

worsens, it creates a host of environmental and quality of life issues. Over time, as traffic problems mount, it could create a disincentive for new investment and growth in the area.

Major Tourism/Mixed Use Development

The site of the former Norwich Hospital is being considered for a variety of development options; chief among these is a major new tourism/mixed use venue targeting a different demographic than the casinos. This proposal calls for investment approaching \$1 billion spread out in three phases over a 12-year period — phase one is projected to run close to \$100 million. Estimated daily visitor counts range from 10,000 to 20,000 *per day*.

Should this become the development project selected for the Preston-Norwich site, expected impacts could include:

- average daily traffic volume on I-395 exceeds planned capacity by 2008-2009 and the situation on I-95, already operating above planned capacity, deteriorates further;
- demand for housing increases, exacerbates affordability issue;
- significant tightening of the regional labor market resulting in increased levels of in-bound commutation;
- growth of an estimated 20,000 new jobs, most of which will be in the tourism/services sectors — typically low-paying industries.

Insufficient data are available to estimate detailed fiscal impact on local communities but, based on the casino experience, it is reasonable to assume that significant public investment will be needed to address the infrastructure and public safety issues associated with a development of this magnitude. It is unclear whether or not increased property tax revenues will be sufficient to offset increased demand for public investment and service.

Should this project develop as outlined in the current iteration, it could be a powerful influence in heightening the awareness and visibility of eastern Connecticut. The combined draw of the casinos coupled with this type of development could make tourism the dominant industry in this part of the state. The drawback to this, however, is that the region is moving from a defense dependency to a tourism dependency — in both cases, an unhealthy reliance on a single sector.

CHAPTER III:

THE REGION'S ASSETS AND BARRIERS TO DEVELOPMENT

The analysis of the region's economy identified the major economic challenges that the region faces. These include growing dependency on a tourism-based economy, the vulnerability of its remaining defense-related jobs, reduced number of higher quality job opportunities, the growing disparity between the have and have not communities and residents, and the potential threats to the region's quality of life and economic development posed by different growth scenarios. This section looks at the region's economic resource base — those key assets that help to define what is unique about SECT and what its potential areas of competitive advantage may be. It also examines some of the weaknesses in the economic resource base and identifies some of the key barriers that need to be addressed if the region is going to achieve its economic potential and maintain the quality of life that is valued by its residents.

Key Economic Assets

Marine-related Resources

Marine-related resources have defined the SECT economy for centuries and remain one of the region's most critical assets upon which to build. A significant portion of the SECT economy is linked to the sea. From the fishing fleet in Stonington, to Mystic Seaport, to the Navy in Groton there is a broad range of activities that depend on proximity to the sea. Clearly, Long Island Sound and the waterways flowing into the Sound provide the region with its most critical economic resource.

As noted in the discussion on the marine-related cluster, there are many elements of the marine economy in SECT including:

- **Marine transportation:** Passenger ferries and cargo transportation.
- **Marine infrastructure:** The State Pier and the Central New England Railroad Pier in New London, and Buchanan Marine in Norwich, which has been developing property to be used as a transfer site for moving bulk cargo from barges to rail cars on New England Central Railroad.
- **Defense facilities:** This includes the submarine building operations at Electric Boat, the U.S. Navy submarine base, and other associated activities.
- **Marine-related educational institutions:** There are two institutions of higher education in the region that are based in SECT because of its location on Long Island Sound — the Coast Guard Academy and Avery Point in Groton, the UConn Marine Sciences campus.

- ***Research and development facilities:*** The National Undersea Research Center, a NOAA-funded facility dedicated to the study of undersea environments in the North Atlantic and the Great Lakes, the Institute for Exploration at the Mystic Aquarium specializing in deep-sea research and ocean exploration, the Ocean Technology Foundation focusing on understanding the marine ecosystem and preservation of marine resources, and the Coast Guard Research and Development Center developing technologies related to maritime safety and security.
- ***Marinas and beaches:*** Recreation provided by the sea is an important part of the quality of life of Southeast Connecticut. There are at least 30 marinas and boatyards along the shore of Long Island Sound as well as beaches.
- ***Marine-related tourism sites:*** A few of the leading attractions in the area are the Mystic Seaport, Mystic Aquarium, and the Nautilus Museum.

This summary shows the variety of marine-related assets in the SECT region. Many of these resources are linked to the economic clusters as well as each other. Even assets as seemingly different as nuclear submarines and tourism are linked, as the USS Nautilus has been turned into a popular museum and tourist attraction.

Academic Institutions

The SECT region has an extremely strong set of institutions of higher education that have a profound influence on the economic, cultural, and intellectual character of the region. The students, faculty, staff, alumni, and visitors associated with these colleges and universities contribute millions of dollars a year to the regional economy. These institutions are major employers in the region and purchase goods and services from businesses throughout the region. They also provide residents of the region, as well as local employers, with an extremely diverse set of degree and non-degree programs. In addition, the colleges and universities attract young people to the region as well as highly skilled faculty who come to teach and then make southeastern Connecticut their home.

In addition to the individual colleges and universities that are described below, the institutions in the region have formed the Southeastern Connecticut Higher Education Consortium with the purpose of enhancing the student and faculty environment of the individual institutions and strengthening the higher education learning environments in the region by sharing opportunities for new knowledge, experience, and service.

Connecticut College: Connecticut College is a small, selective private liberal arts college with an enrollment of 1,850 men and women. The college was founded in 1911 and, according to the college, is particularly known for interdisciplinary studies, innovative international programs, paid internships, and a wide range of student-faculty research opportunities. While located in New London, the college is isolated from the downtown area of New London. The previous president of the college, Claire Gaudiani, was very involved in the economic development of the city and committed to making increased connections between the college and the city of New London. Today, the most significant college activities in the region take the form of student volunteerism and contribution to the local arts and culture environment. Connecticut

College established the Hollaran Center for Community Action and Public Policy, which runs academic programs and also helps connect students with local volunteer opportunities. The college is increasingly concerned with rising housing prices for faculty and staff as well as a livelier downtown that would make the area more attractive to students.

University of Connecticut at Avery Point: The Avery Point campus in Groton has three undergraduate degree programs, two of which (coastal studies and maritime studies) are related to the coastal and maritime aspects of the campus' marine mission. The campus also has an American studies degree program and a minor in entrepreneurial studies and a certificate in entrepreneurial studies. At the graduate level, the Marine Sciences Department confers masters and doctorate degrees in various disciplines within the marine sciences. In addition to its academic programs, the campus houses a number of research programs and projects including the Coastal Environmental Research Facility, the National Undersea Research Center — North Atlantic & Great Lakes, The Connecticut Sea Grant College Program, the U.S. Coast Guard Research and Development Center, Project Oceanology, a marine science and environmental education organization, and the Long Island Sound Resource Center.

Mitchell College: Mitchell College is a coeducational, private residential institution offering associate and bachelor degree programs in the liberal arts and professional areas. The college is located in New London and has a current enrollment of about 450 students. It has two-year programs in such areas as graphic design, computer information systems, early childhood education, marine science, physical education, and other human service and business degrees. Its four-year programs are in early childhood education, business, sports management, human development, liberal studies, criminal justice, and psychology. In April 2004, Mitchell College opened the Office of Community and Professional Programs, which will be responsible for the College's Microsoft IT Academy, summer camps, continuing education, evening and Saturday classes, community outreach and marketing, and scheduling use of the facility.

Rensselaer Polytechnic Institute at Hartford (RPI) — Groton Site: RPI works with companies to design and deliver training programs for employees in computer and engineering technology, leadership development, management and supervisory skill development, and quality/process improvements. While its major Connecticut campus is in Hartford, it does operate programs out of its site in Groton.

United States Coast Guard Academy: Established in 1876, the United States Coast Guard Academy is one of the smallest and most selective of the nation's service academies. It is located on the Thames River in New London, and provides a four-year Bachelor of Science program with a full scholarship for each individual. The Academy has a total enrollment of about 850 cadets and annually commissions approximately 175 ensigns. Graduates of the Academy are obligated to serve five years. The U.S. Coast Guard Academy is also home to the Coast Guard Leadership Development Center (LDC). This center, opened in 1998, enrolls about 500 students a year in courses aimed at improving leadership skills, and is open to all Coast Guard personnel.

University of New Haven/Southeastern Graduate Center in New London: This satellite campus of the University of New Haven is located on the campus of Mitchell College in New

London. The school offers academic degree programs for full-time working adults interested in career advancement. The Graduate Center focuses on graduate programs including a Saturday MBA program, Accelerated Master of Science in Computer Science, Master of Science in Education, and an Executive Master of Science in Engineering Management.

Eastern Connecticut State University (ECSU): While not located in SECT, but in nearby Willimantic, ECSU has three schools: the School of Arts and Sciences, the School of Education and Professional Studies, and the School of Continuing Education. The university also has an Executive Master's Program, weekend MBA program, Master of Science Program in Financial Management, and professional programs in Oracle development, Access, and Enterprise Management.

Three Rivers Community-Technical College: On May 5, 1992, the Connecticut General Assembly enacted Public Act 92-126 merging the community and technical colleges in five geographic areas. As a result, Thames Valley State Technical College and Mohegan Community College were officially combined to form a comprehensive, publicly supported college serving the diverse educational needs of the residents of the southeastern and eastern regions of the state. In November 1992, the newly consolidated college was renamed Three Rivers Community-Technical College in recognition of the region's three primary rivers: the Shetucket, the Yantic, and the Thames. The multi-campus commuter college consists of two campuses in Norwich, the Thames Valley campus and the Mohegan campus, as well as two off-campus instructional centers located at the Naval Submarine Base in Groton and Waterford High School. The school enrolls about 3,500 full- and part-time students in credit programs and 1,400 students in credit-free continuing education programs each year. Currently, there are plans to create one consolidated campus in Norwich.

The Lyme Academy of Fine Arts: Located in Lyme and founded in 1976 by sculptor Elisabeth Gordon Chandler, this college has approximately 181 undergraduates and offers a three-year professional certificate and a four-year Bachelor of Fine Arts Degree in painting and sculpture. The school also has a Continuing Education Program. The sculpture curriculum of the Academy includes figure and portrait modeling as well as intermediate and advanced sculpture concepts. The Lyme Academy is also one of three co-sponsors of the National Sculpture Competition.

Arts and Cultural Assets

For a region of its size, New London County has an extraordinary number of arts and cultural institutions that provide the region's residents with a wide array of opportunities for cultural enrichment, as well as providing an important "product" to market in the region's tourism cluster. These assets are a critical component of the region's quality of life and are the foundation of the region's creative cluster discussed earlier.

Visual Arts

The region has a rich array of museums and galleries, both nonprofit and commercial. These include:

- Lyme Academy of Fine Arts;
- Florence Griswold Museum;
- Lyman Allyn Museum of Art;
- The Mystic Art Association;
- Slater Museum at Norwich Free Academy;
- Cummings Arts Center Gallery at Connecticut College;
- New London art galleries — Alva Gallery and the Hygienic Galleries and Artists Cooperative;
- Alexey Von Schlippe Gallery at the Avery Point Campus in Groton;
- Galleries in Mystic, Stonington, Norwich, New London, and Guilford.

Theater

Another area of particular strength in SECT is in theater. The region has a number of innovative theater companies and nationally recognized theater centers. These include:

- *The O'Neill – Eugene O'Neill Theater Center:* Established in 1964 and named in honor of America's only Nobel Prize-winning playwright who grew up in New London, the O'Neill is home to six distinct programs: the O'Neill Playwrights Conference, Music Theater Conference, Puppetry Conference, National Theater Institute, Critics Institute, and the Monte Cristo Cottage. The mission of the O'Neill is the development of new work for the stage, and education of theater artists and audiences.
- *Spirit of Broadway Theater in Norwich:* This 74-seat, black box theater, specializes in producing off-Broadway and regional theater scripts along with the development and full production of new works for the stage. The theater's commitment to artistic innovation has attracted national attention and has attracted audiences from throughout the northeast.
- *Majestic Rose Dinner Theater:* This company is located in the Slater Mansion in Norwich and puts on about five or six plays each season.
- *The Donald L. Oat Theater:* The Norwich Arts Council presents a variety of theater and performing arts events at this newly renovated theater.
- *Avery Point Playhouse:* This theater, located at UConn's Avery Point Campus, was established to support the development and production of new works by emerging artists as well as theater classics.
- *Flock Theater:* Innovative productions using live actors and puppets offer "Shakespeare in The Arboretum" annually during the summer and performances throughout the year in a variety of venues of classic and original plays.

Music, Performance Venues, and Entertainment

SECT benefits from both a wide variety of venues that present nationally known talent in the music and entertainment industries, as well as a symphony and band that are based in the

region. Clearly, the number of venues for arts and culture is a key asset for the New London County. The resources for music and entertainment include:

- *Eastern Connecticut Symphony Orchestra:* The professional symphony orchestra presents five subscription concerts all performed at the Garde Arts Center in New London. The Music Director, Xiao-Lu Li, is also Chief Conductor of the China National Symphony Orchestra and the Bangor Symphony Orchestra.
- *U.S. Coast Guard Band:* The Coast Guard Band is one of five premiere military bands in the country and its work is widely known due to its touring as well as musical recordings. Within the region, the Band provides free concerts throughout the year.
- *Garde Arts Center:* In 1985, a group of community leaders created the Garde Arts Center as a nonprofit performing arts organization with the initial goal of preserving the historic theater in the city of New London. Today, Garde Arts Center has become an “arts block” comprising four adjacent historic buildings as a multi-space center for arts, education, commerce, and community events. In 1987, the Eastern Connecticut Symphony Orchestra made the Garde its new home. And, the Center began presenting a full spectrum of performing arts series: dance, musical theatre, contemporary music, and family events.
- *Casinos:* The casinos in SECT have contributed to the region’s performance assets with the development of Wolf Den and the 10,000-seat arena at Mohegan Sun, and the Fox Theatre, the Events Center, and the Intermezzo Lounge at Foxwoods. Both casinos attract top talent.
- *Connecticut College:* The college has a number of performances and lectures that are free or low-cost and open to the community including On Stage at Connecticut College.
- *Summer Music at Harkness:* A series of popular and classical music outdoor concerts performed at Harkness State Park throughout the summer months.

Locational Advantages within the Northeast Corridor

Southeast Connecticut is located between the New York and Boston metropolitan areas — two of the largest markets in the nation. It is traversed by I-95, the most important highway on the east coast. Further, it is on the Long Island Sound, providing access to both marine transport and recreational boating. Finally, while not a low-cost region, it offers a somewhat lower cost of living than competing areas of the northeast with a similar package of assets and amenities.

Southeast Connecticut, therefore, offers distinct locational advantages for firms looking for sites within the Northeast Corridor. Its location provides access to major markets. Businesses needing port and/or rail access can be accommodated at the Port of New London or elsewhere. Land is typically more available and less expensive than locations closer to the major metro areas. Finally, the history of precision manufacturing and research and development in the area provides a skilled labor force (discussed elsewhere) that makes the region attractive for certain types of specialized production and research activities.

♦ ***Sites and land available for development.***

During the region's industrial heyday, industrial and commercial development was clustered along the Long Island Sound, the Thames River, and the railroads. Now the highways are the major magnets for development, providing access for both goods and people. Fortunately, the region still has significant amounts of developable land available along the major highway corridors. While no comprehensive inventory of development sites was undertaken for this CEDS, the following is a list of large development sites and areas with access to major highways and roadways:

- Large tracts of undeveloped, industrially-zoned land are located along Route 117 in Groton, near an interchange with I-95.
- Additional industrial and commercial park sites are located south of I-95 in Waterford. Although major retailers have expressed interest in these sites, Waterford has held to a zoning policy limiting their use to office and light-industrial users.
- North Stonington has several commercial sites located off I-95.
- Additional corridors with development potential include Route 32 in Montville, and Route 12 in Ledyard. Route 12 is already home to a Dow Chemical facility, and has undeveloped tracts owned by Pfizer, Dow, and others.
- The Norwich Business Park off I-395 is mostly full, although there are still some empty buildings. Expansion is being considered in the adjacent town of Franklin.

There are also two major redevelopment sites in the region:

- The largest of these is the 470-acre Norwich Hospital site, which is located in both Norwich and Preston. The state is currently accepting proposals for the site. The proposal that has generated the most interest, skepticism, and questions is the Utopia project, which would develop an enormous theme park/film studio on the property.
- The Fort Trumbull and Shaw's Cove sections of New London offer multiple office sites, close to the downtown, and most with waterfront views.

♦ ***Lower cost of living relative to the Boston region and Fairfield County.***

While relative to many other places in the U.S., the cost of living in SECT is high, when compared to many other regions of New England and the northeast, the cost of living remains relatively low. According to the ACCRA Cost-of-Living Index, the composite cost of living in the Norwich-New London metro region is 118 (as compared to 100 for all the metro regions in the nation). This measure was well below the Stamford region (with an index of 163.2), Hartford (index of 123.6), and just about the same as the New Haven region (117). It was also well below that of the New York City region (217.1) and Boston (136.9). Only the Worcester metro region with a composite score of 115 was below that of the New London region.

Regional Organizations

In southeastern Connecticut, there is a viable civic infrastructure, evidenced by the presence and capabilities of a number of organizations. Following is a listing of the principal organizations in the region that play an important role in sustaining the region's economy and quality of life.

- *SouthEastern Connecticut Enterprise Region (seCTer)*. seCTer is a nonprofit regional economic development agency serving 21 New London County towns and Westerly, Rhode Island. seCTer conducts a number of programs and activities in support of its mission of stimulating and sustaining economic development, including regional and national marketing programs, a database of available commercial and industrial sites, a small business incubator, the Procurement Technical Assistance Program (PTAP), and regional revolving loan funds. It also provides staff support to the Thames Maritime Coalition, a group of maritime-related businesses and institutions that facilitate communication and resolution of harbor safety and other issues of interest to the maritime community, and the SUBASE Realignment Coalition.
- *Southeastern Connecticut Council of Governments (SCCOG)*. SCCOG is the regional planning organization for 20 southeastern Connecticut municipalities. It is also the region's Metropolitan Planning Organization responsible for developing a transportation plan for the area. It is involved in regional issues such as housing, workforce development, emergency operations, and hazard mitigation planning. The chief elected officials of member towns serve on the SCCOG board.
- *Eastern Connecticut Workforce Investment Board (EWIB)*. EWIB is a not-for-profit agency responsible for planning and overseeing workforce development activities authorized and funded under the federal Workforce Investment Act. Formed in 2003 through the merger of two smaller WIBs, it serves 41 eastern Connecticut municipalities. The EWIB develops a regional local workforce development plan and contracts with community-based organizations, agencies, and education entities to provide job preparation, vocational training, and job placement services to eligible adults and youth through its One-Stop centers and Youth Services Program. EWIB contractors also provide no-cost employment services to regional employers. The EWIB's 35-member board of directors, appointed by a regional council of chief elected officials, is comprised of representatives from regional businesses, state agencies, regional legislators, organized labor, and local education agencies.
- *United Way of Southeastern Connecticut*. United Way is a local, nonprofit organization that raises funds for 100 local programs providing a broad range of health and human services. These include several education and workforce development programs, as well as human service programs such as childcare and health services that support employment. Its 33-member board includes social service providers, business leaders, and private citizens.
- *The Rhode Island/Connecticut Collaborative*. The Collaborative is a bi-state public-private partnership covering southeastern Connecticut and southern Rhode Island. It provides a forum for collaboration on issues of importance to the bi-state region, with a

focus on development of maritime technologies (including defense/homeland security), open space preservation (i.e., Pawcatuck Borderlands), tourism marketing, and support for the maritime trades cluster (i.e., marine manufacturing, marine recreation, commercial fishing, and defense). Connecticut-based partners include the Chamber of Commerce of Eastern Connecticut, New London Development Corporation, Northeast Utilities, Electric Boat, Connecticut Department of Tourism, and the Nature Conservancy of Connecticut.

- *Chamber of Commerce of Eastern Connecticut.* The Chamber defines its mission as creating and maintaining a positive business climate that meets member needs by supporting economic development and growth in the region. Its efforts focus on promoting a regional identity, advocating for supportive public policies at the state level, providing a forum for leader networking, showcasing member businesses' products and services, sponsoring educational and promotional programs, playing an advocacy role for minority and underrepresented populations, and addressing workforce issues. Its 41-member board includes many of the region's major businesses and institutions. It also has seven divisions focusing on local issues in Ledyard/Preston, Griswold, Groton, Montville, New London, Norwich, and Waterford.
- *Greater Mystic Area Chamber of Commerce.* The Chamber supports the economic, civic, commercial, cultural, and educational development of the Mystic area by marketing the area and member businesses through publications and promotional events, providing business networking opportunities and education programs, and involvement in policy advocacy at the local and state government levels. Some of the Chamber's special areas of focus include public education, marine affairs, and promotion of Historic Downtown Mystic. It also participates on the Mystic Cooperative Task Force, through which representatives of town government, major tourist attractions, the local business community, land use and historic commission members, and local residents work together to address issues affecting the Mystic area.
- *Greater Norwich Area Chamber of Commerce.* A recently formed business organization representing the greater Norwich area business community.
- *Mystic Coast and Country Travel Industry Association.* The Association is a private sector, nonprofit membership organization dedicated to promoting southeastern Connecticut and nearby Coastal Rhode Island as a tourism destination known as "Mystic Places." Association activities include marketing and promotional campaigns, publications, market research, educational programs, and policy advocacy to support the region's tourism industry. The association's 21-member board includes representatives of many of the region's major tourism attractions and hospitality businesses.
- *Connecticut East* (formerly Southeastern Connecticut Convention and Visitors Bureau, dba Connecticut's Mystic and More!). Connecticut East is a publicly-funded Tourism District that markets the 41-town eastern Connecticut region to domestic and international travelers as a destination for vacations, group tours, and meetings, and assists businesses making up the region's tourism industry in promoting their products and services to visitors.
- *Community Foundation of Southeastern Connecticut.* The Community Foundation of Southeastern Connecticut, located in New London, serves an 11-town area comprising

Old Lyme, East Lyme, Lyme, Salem, Montville, Waterford, New London, Groton, Ledyard, Stonington, and North Stonington. The foundation focuses its giving on cultural, educational, health, social services, and other charitable organizations. High priority goes to programs that “strengthen families; improve access to area resources, especially for underserved populations; encourage residents to participate in the cultural life of the community; and add to the general well-being of the community.” It emphasizes activities that demonstrate collaborative efforts and inclusive practices. It also awards a number of college scholarships.

- *Local economic development organizations.* Many of the individual cities and towns in the region have their own local economic development organizations. Most are small and have no professional staff. There is a handful of larger local organizations that have professional staff, including: the New London Development Corporation, Norwich Community Development Corporation, and Main Streets programs in Norwich, Niantic, and New London.
- *Utilities.* The region’s utilities play an important supportive role in economic development through the development and maintenance of water, energy, and telecommunications services. Many utilities also participate directly in economic development activities. Utilities serving southeastern Connecticut include Connecticut Light & Power (which sponsors the Main Street programs in partnership with State of Connecticut and National Trust for Historic Preservation), Norwich Public Utilities, the Connecticut Municipal Electric Energy Cooperative, Yankee Gas, Groton Utilities, the Southeastern Connecticut Water Authority, SBC (formerly SNET), and Comcast Cable, Adelphia Communications, and Eastern Connecticut Cablevision.

Modern, Multi-modal Transportation System

The southeastern Connecticut region is fortunate to have a wealth of multi-modal transportation options typically found only in much larger metropolitan areas. Transportation options include state and interstate highways; passenger and freight rail; passenger and vehicle ferry; marine freight; and air. This infrastructure provides multiple modes for both people and goods movement, and helps reinforce the region’s connections to the major metropolitan markets in the northeast — New York, Long Island, and Boston.

Interstate Highways

Interstate 95 forms the backbone of the regional highway network. It not only serves the entire Northeast Corridor, and is the most heavily traveled highway in the nation, but it also provides the region with the only crossing over the Thames River south of the 2A bridge in Montville. Traffic flows on Interstate 95 are high and are anticipated to grow regardless of local travel and land use characteristics, since much of the traffic flow is super-regional in nature.

Other limited access highways in the region include I-395, which runs between Waterford and the Mass Pike in Worcester, Massachusetts; Route 2, which is a limited access highway from Norwich to Hartford, and a local road from Norwich to Stonington; and Route 11, a divided highway that begins at Route 2 in Colchester and dead ends in Salem at Route 82. Plans to

complete Route 11 to Waterford at the interchange of I-95 and I-395 have been on the books for a number of years.

Passenger Rail and Ferries

The region also enjoys access from passenger rail and ferries. Amtrak service stops at New London, Mystic, and nearby Westerly, Rhode Island (within walking distance of Pawcatuck, part of the Town of Stonington). Amtrak service stops at the New London train station 11 times a day; two of those stops are on the new high-speed *Acela* Express service. Shoreline East, a Connecticut-sponsored commuter service that extends eastward beyond the Metro-North terminus at New Haven, provides limited commuter rail service.

Ferry service is provided between New London and Orient Point on Long Island, Fisher's Island, and Block Island. The Cross Sound Ferry to Orient Point is a major route that carried over 900,000 passengers and nearly 380,000 vehicles in 2000. Recent ridership estimates indicate an increase to 1.3 million annual passengers and over 400,000 vehicles. The service is popular with casino patrons. The ferry to Fisher's Island is the only commercial route to the island, and carried 164,000 passengers and 47,000 vehicles in 2000, many of them seasonal.

Rail Freight and Ports

The region has two rail freight lines — the New England Central Railroad on the west side of the Thames River, and the Providence and Worcester Railroad on the east side. The New England Central line provides rail access to the New England Railroad Pier adjacent to the State Pier at the Port of New London (discussed below).

Marine freight facilities are centered on the Admiral Harold E. Shear State Pier and adjacent Central New England Railroad Pier in New London, collectively referred to as the Port of New London. Infrastructure at the port includes three liquid berths, one dry bulk berth, one general cargo berth, 100,000 square feet of standard warehousing, and 10 acres of open storage. The primary cargo moving through the port is lumber. Several options have been explored for enhancing the facility; the option favored in the most recent regional transportation plan calls for (1) a new 50,000-square-foot warehouse; (2) a new terminal building for high-speed and commuter ferry operation; (3) additional parking for 35 cars; (4) a 12,000-square-foot office building; and (5) a 55,000-square-foot building for light industrial/warehouse use. The State Pier has been increasingly a focus of state efforts to better deploy its portfolio of transportation assets in view of the need to remove truck traffic from I-95.

Air Access

The final link in the multi-modal chain is the Groton-New London Airport. The airport serves general aviation purposes. US Airways Express had operated four daily roundtrip flights to Philadelphia, with connections to over 80 destinations, but this service ended in 2003. Boston-Maine Airways initiated service in 2003 using 19-passenger turboprop aircraft and (as of June 2004) serves Portsmouth, New Hampshire, and Bedford and Trenton, New Jersey. Passenger service will remain limited for the foreseeable future, and the airport's greatest role will likely remain in general aviation, where it is an asset for companies (such as Pfizer) that make use of

corporate jets. T.F. Green Airport in Rhode Island, with much more extensive commercial passenger and cargo service, is 40-50 miles away and typically less than an hour's drive from the region, and Bradley International airport, located just north of Hartford, is also an hour's drive from most towns in southeastern Connecticut.

Utilities

The availability and cost of utilities, including voice and data transmission (or telecommunications), water, sewer, natural gas, and electricity, can be a significant factor in many business location decisions. Southeast Connecticut has multiple providers — private, public, and quasi-public — for these basic utilities. The area is somewhat unique in that it has four municipal utility companies that provide electric service, one of which is also making a foray into the broadband Internet access business. The following provides a brief overview of these providers under each category.

Water and Sewer

Municipal utility companies generally provide water and sewer service in the region. These include Norwich Public Utilities, Groton Utilities, and Jewett City Public Utilities. The City of New London also has its own water company. The service areas for these utilities extend beyond their municipal borders. As examples, Jewett City Public Utilities (located in Griswold) provides sewer service to Lisbon Landing in Lisbon. Norwich Public Utilities could provide sewer and water to a redeveloped Norwich State Hospital site, even though much of the site resides in Preston. New London provides water to Waterford.

Groton Utilities is a significant provider of water for the region. The utility was set up to provide large quantities of water to several manufacturing concerns, including Electric Boat and Pfizer. With EB operating well under its historic capacity, and the Pfizer facility having switched its emphasis from manufacturing to less intensive research and development, Groton Utilities now has an excess of water supply.

Until recently, there was no means for Groton Utilities to provide water to areas west of the Thames River. With the completion of the Thames Basin Regional Water Interconnection Project, the centerpiece of which is an underground pipe crossing the Thames in the vicinity of the Mohegan Sun casino, the excess water capacity in Groton will be available to service areas west of the Thames during peak demand. This project was funded in large part by the Mohegan tribe to address water demand at the casino complex. Yet, it remains the most notable example of regional cooperation with regards to infrastructure.

Areas requiring water service outside of the municipal service areas are served by the Southeast Connecticut Water Authority (SCWA), a regional utility originally intended to serve the entire region. An exception is Foxwoods, which has its own water system that uses treated groundwater. Foxwoods also has its own sewer plant.

Electricity and Gas

Throughout much of the region, electrical and natural gas service are provided by Northeast Utilities, specifically its Connecticut-based divisions Connecticut Light & Power (CL&P) and Yankee Energy Group (or Yankee Gas). Northeast Utilities is the largest, but not the sole, provider of these services. Norwich Public Utilities also provides natural gas service. Further, there are four municipal electricity providers: Groton Utilities, Norwich Public Utilities, Jewett City Public Utilities, and Bozrah Light and Power (which is owned by Groton Utilities).

With regards to natural gas, Norwich Public Utilities serves Norwich and Preston. Yankee Gas serves all other areas. Yankee Gas also serves the Mohegan Sun complex, while Foxwoods obtains gas service from Norwich Public Utilities.

The municipal electric utilities do not have their own generating capacity, but rather buy their power cooperatively through the Connecticut Municipal Electric Energy Cooperative (CMEEC). CMEEC serves to navigate the increasingly complex waters of the energy markets to purchase electricity at the lowest practical price. CMEEC sets the wholesale rate at which the municipal utilities can buy power; each utility then sets its own rates.

The municipal utilities generally provide highly competitive electric rates for the northeast region. Groton Utilities, in particular, has a high inverse-load factor, meaning that much of its customer base is comprised of commercial and industrial rather than residential accounts. This helps balance power demand throughout the day and the seasons, allowing for lower rates. The small utilities are also able to work closely with their large customers to craft power contracts that meet the particular needs of the user at the best achievable price point.

The region is also a significant source of electricity for the northeast. The Millstone Power Station, located in Waterford and owned by Dominion Resources, Inc., operates two commercial nuclear reactors, and is the largest generating plant in Connecticut, and provides one-third of the state's power.

Communications

Although Connecticut has deregulated local phone service, SBC is still the dominant provider. SBC also offers high-speed Internet (including DSL) and wireless communications to the region.

Comcast is one of the region's cable TV providers and also provides high-speed Internet access to cable customers. Comcast has been without competition for these services. Recently, however, Groton Utilities has entered the cable and broadband business, and will be offering the service to its customers at about the time that this report is issued. Groton Utilities expects to offer competitive rates and services. It will eventually offer service in the same five towns served by Comcast: Groton, Ledyard, Stonington, North Stonington, and parts of Voluntown. Other cable providers include Adelphia Communications and Eastern Connecticut Cablevision.

Quality of Life

Some of the elements that define a region's quality of life include its arts and cultural environment, its natural environment and associated recreational amenities, and the sense of "place." An analysis of the assets in SECT finds that while many regions extol their quality of life as one of their greatest assets, in SECT the combination of arts and cultural assets (discussed above), marine assets (discussed above), natural and recreational assets, and historic quality, combine to provide an unusually deep set of amenities leading to a very high quality of life.

Environmental and Recreational Amenities

SECT has a great deal of open space resulting, in part, from its agricultural base and its forested land. The more than 300 farms in the area are an important regional asset — one that has come under increased pressure due to development. In 1997, the county had more than 67,000 acres of farmland, which represents about 15 percent of total land area. The region is heavily forested as well, with almost 70 percent of the land cover rated as forest — including both public and private ownership.

In the northern part of the region is the Pawcatuck Borderlands. This 136,000-acre section of unfragmented forest is in the Thames and Pawcatuck watershed. The Borderlands, which is in both Connecticut and Rhode Island, is an incredible resource, if properly managed.

The SECT region also has a rich array of recreational resources including:

- 11 public parks;
- 3 public beaches;
- 18 golf courses and related facilities;
- 53 marinas and related activities.

Heritage and History

From the Norwich City Hall to the historic houses found through the region, SECT has a rich sense of place that is based upon its heritage. As noted, much of this history is tied to the sea. However, the region also has a history tied to the Native American tribes who have lived in the region, and its deep industrial history. Specific assets that focus on the history in the region include:

- the Mashantucket Pequot Museum and Research Center;
- historic houses and other buildings including the Monte Cristo Cottage, Eugene O'Neill's boyhood home, the Nathan Hale Schoolhouse, the US Custom House, and Shaw-Perkins Mansion in New London; the Leffingwell House Museum in Norwich and the Nathaniel Palmer House and Old Stonington Lighthouse in Stonington, among others;
- The Slater Memorial Museum in Norwich;
- Mystic Seaport: the Museum of America and the Sea in Mystic;
- Historic Ship Nautilus/Submarine Force Museum;

- Forts Trumbull and Griswold in New London and Groton, respectively.

Sources of Technology and Innovation

With the location of Pfizer, a major research facility in the biotech industry, as well as the marine- and defense-related research and development activities that are located in SECT, the region has a relatively rich potential in the area of technology and innovation. One measure of this capacity is in patent activity, a commonly used measure of innovation. Between 1994 and 2003, the number of patents issued annually in SECT had more than doubled, from 124 to 252.²

During this period, pharmaceuticals and chemicals have accounted for 50 percent of all new patents, attesting to the importance of these industries (particularly Pfizer) as sources of innovation and development in the regional economy.

Economic Development Challenges

While SECT has enormous economic assets upon which to build, it also faces a number of barriers to development that need to be addressed if the region is to reach its full potential and achieve the vision that it set for itself as part of the CEDS process. The following sections identify some of these challenges.

♦ *Serious shortages of housing: both availability and affordability.*

In 2002, the SCCOG issued a report *Housing a Region in Transition: An Analysis of Housing Needs in Southeastern Connecticut, 2000-2005*. This study concluded that there were a number of serious issues related to the availability and affordability of housing in the region. It resulted in the creation of the Blue Ribbon Housing Initiatives Panel. In March 2004, this report was updated by SCCOG at the Blue Ribbon Panel's request. The report concluded that the region will fall far short of meeting the balance between owner-occupied housing and rental units forecast as needed by 2005 if current construction trends continue, leading to a significant shortage of rental units.

Recently compiled data show that housing production has started to accelerate as a result of the pent up demand. Residential building permits issued grew every year from 2000 to 2003, increasing from 433 to 1,067, for a four-year total of nearly 3,000 (U.S. Bureau of the Census, as compiled by Richard Erickson, AICP). Yet, a closer look at the data reveals continued problems. While the shortage is worst for affordable housing — 87 percent of the permits over the time period were for single-family homes — only 14 percent of the permits contributed to new rental housing, far below the need identified in the 2002 report, *Housing a Region in Transition: An Analysis of Housing Needs in Southeastern Connecticut, 2000-2005*. Further, very large shares of these permits were issued in the region's urban communities — one-quarter of the 2003

² Total patents issued between 1994 and 2003 totaled 1,152 broken down as follows: pharmaceuticals (338); chemicals (228); biotechnology (62); electrical appliances and components (50); measurement and control instruments (48); agriculture (43); power generation & distribution (31); misc. machinery (31); industrial machinery (29); office equipment (29); telecom (27); misc. manufacturing (26); plastics, polymers, and rubber (25); all other (185).

permits were in Norwich alone. Groton, New London, and Norwich cannot be expected to maintain this pace of production indefinitely.

♦ ***Limited physical infrastructure at development sites.***

While the region has a significant amount of appropriately zoned commercial and industrial land available for development, much of this land lacks the necessary infrastructure to support development: roadway access, water, and sewer. The strategic provision of such infrastructure should be a major focus of future public investments. As examples:

- Large sites off Route 117 in Groton will need roadway access improvements.
- The Route 12 corridor in Ledyard is without sewer pipes.
- The expansion of the Norwich Business Park is contingent on the extension of sewer service.

These investments are currently being made at the municipal level. Yet, there is justification for a larger regional role. Many times, municipal agreements are necessary — the development of Lisbon Landing required an expansion of the plant in Griswold, and the possible extension of sewer service to Route 12 in Ledyard will require the cooperation of the Town of Groton. Regional plans such as this CEDS can help identify priorities for investment, as well as to set forth the criteria for making such decisions.

♦ ***Periodic traffic gridlock in parts of the region.***

The southeastern Connecticut region suffers from two traffic problems caused by factors wholly outside of local control — the growth in volumes along the I-95 corridor and traffic generated by the enormous popularity of the two casinos.

Traffic on I-95, while always heavy, is also highly seasonal. Traffic volumes tend to peak in August as households throughout the northeast embark on vacations, adding to the already high background flows. In 2002, average daily traffic volume on I-95 in Groton varied from less than 60,000 vehicles in January to over 85,000 vehicles in August. Summer volume is rapidly approaching double the capacity of I-95, which has two travel lanes in each direction through much of the region. As traffic is expected to grow along the corridor, ever more frequent slowdowns and backups can be expected.

The traffic problem on I-95 has several negative implications for economic development. First, it increases the costs of goods movement into and out of the region. The extent to which this discourages development is unclear — all trucked goods bound for the coastal metropolitan areas in the northeast must pass through this corridor regardless — but such costs do have long-term implications for the region's economic competitiveness. Second, local commuters and residents also use I-95 — congestion increases commute and travel times and negatively impacts the quality of life. But perhaps most importantly, I-95 is the primary route by which tourists access the region. As travel along this corridor grows increasingly frustrating, many of these tourists will start to consider other options for their leisure time. Ironically, the casinos, while the largest source of tourist traffic, may be less impacted because their business is not as seasonal in nature.

Traffic volumes are also increasingly heavy on the highways and roads that serve the casinos — Routes 2, 2A, and 32, as well as I-395. Unlike other tourist traffic, traffic to the casinos does not vary much from summer to winter. The traffic also occurs both during the commuter hours — over 20,000 people work at the two casinos — and throughout the day and evening, as the casinos can each attract between 25,000 and 50,000 visitors a day. The most significant problems are associated with Foxwoods. Unlike Mohegan Sun, with its easy access from I-395 via a dedicated off-ramp from Route 2A, Foxwoods is located along a two-lane roadway, Route 2. Over the longer haul, improvements to Routes 2 and 2A in Preston, Ledyard, and North Stonington will be necessary to offset the growing levels of congestion and to facilitate the continued health, and even expansion, of the casinos and ancillary attractions.

♦ ***Ailing urban centers with older infrastructure.***

The region's two oldest urban centers, Norwich and New London, are unsurprisingly beset by a number of urban ills. These include: a concentration of population living near or below the poverty line; a declining tax base; abandoned industrial sites, many with environmental contamination; an aging building stock, much of it requiring significant inputs of capital to be made productive; and aging and strained infrastructure.

These problems are more than just local issues. Their causes and impacts are region-wide. As examples, the cities are the primary source of housing affordable to the region's low-income workers, in addition to being the home of much of the region's poor population and the location for social services. Many of the environmentally contaminated sites are located along waterways and estuaries — their cleanup is of regional concern. Both Norwich and New London are gateways for visitors — their condition affects perceptions of the region as a whole.

A comprehensive urban strategy must address not only the downtown areas, which are the most visible face of the urban communities, but also their neighborhoods, where most of the population lives. This CEDS has concentrated on the downtowns and waterfronts because of the economic development focus, but other planning efforts must be mindful of the need for decent, affordable housing, safe streets, parks and community facilities, and other aspects that comprise the local quality of life.

♦ ***Growing diversity without the social infrastructure to address accompanying needs.***

As noted in the analysis of the economy, the region has seen a significant increase in the number of immigrants and non-English speaking residents due to the lure of jobs at the two casinos. This rather rapid demographic shift has meant that the region has not had the time to develop the type of services that would be needed to serve this changing population. Public schools in the region have suddenly seen a rapid rise in the need of ESL services in their schools. Healthcare institutions do not have the translators that are needed to understand the needs of patients. And many of the region's human service agencies lack counselors who can speak Chinese or Spanish. In short, the region must adjust many of its basic services to better accommodate the needs of these new residents.

♦ *A fragmented civic infrastructure.*

Like many other regions of New England, SECT supports an array of organizations that are focused on strengthening the regional economy, supporting local employers, and ensuring the economic well-being of residents. These organizations were cited as an asset in the above discussion. However, this “civic infrastructure” is not as strong as it could be and is constrained by a number of factors:

- the region, for a variety of reasons, has two separate tourism agencies;
- the individual cities and towns all have their own economic development capacity — for example, Norwich and New London have developed or are developing their own CEDS;
- efforts to cooperate with Rhode Island have been frustrating and not fully realized;
- there are a number of chambers of commerce in the region that operate independently.

♦ *Fiscal challenges facing the municipalities in the region.*

Most of the cities and towns in SECT are facing increasing fiscal pressures. Much of this pressure is due to the over-reliance of the state on property taxes. The recent report of the Blue Ribbon Commission on Property Tax Burdens and Smart Growth Incentives reported that the property tax burden in Connecticut is the third highest in the nation on a per capita basis and the tenth highest in percentage of personal income. Moreover, Connecticut is more reliant on property taxation for funding K-12 education than all other states in the nation. This report concludes that this over-reliance on property taxes has led municipalities in Connecticut to limit residential developments that would result in an increase in public school students, has resulted in competition between neighboring cities and towns for commercial and industrial development, has led to land use policies that are designed to maximize local property tax revenues, has led to disinvestments in the cities and more urbanized areas, and, finally, has contributed to sprawl. Another recent study, *Connecticut Metropatterns*, has reached similar conclusions. This study also finds that all communities are hurt by the way Connecticut is growing and points to the fiscal pressures resulting from over-reliance on the property taxes as one of the key reasons for these development patterns. Clearly, unless there are strategies for reducing the fiscal stress being experienced at the municipal levels, there will be significant barriers to achieving the goals of a regional economic development strategy that benefits all of the cities and towns of SECT.

CHAPTER IV:

STRATEGIC PLAN

Framework and Goal Summary

This CEDS builds upon the current state-of-the-art thinking in economic development around the nation. As stated in a recent summary of best practices by Collaborative Economics for The Heinz Endowments in Pittsburgh, this paradigm “is a shift from direct provision of tax incentives, public subsidies and services to attract industry on the basis of cost to a broker of technology, training and capital resources to grow networks of firms with industry clusters on the basis of quality.” Some of the key conceptual elements that form the framework of this strategy are:

- ***The growing importance of regions as economic units.*** Communities are increasingly linked together in regional economic units. The economic well-being of residents of a particular community is ultimately linked to the ability of the private sector in the entire region to thrive and compete successfully in a global arena. Any single municipality in the southeastern Connecticut region can do little to change the conditions affecting the competitiveness of private employers. In addition, it clearly cannot compete efficiently with other locations that have achieved efficiencies and economies of scale through regional, multi-jurisdictional action.
- ***Integrating both the supply side and the demand side of the labor market.*** Most economic development plans tend to focus exclusively on labor demand — promoting employment growth in the private sector. This work emphasizes *economic clusters* with strong regional competitive advantages. There is often insufficient attention to labor supply — developing and supporting residents who can be productive contributors to the region’s economy. Developing the supply of workers means ensuring that residents of the region have basic occupational skills and are able to access jobs. The southeastern Connecticut strategic plan includes strategies focused on retaining and creating jobs in key clusters, as well as strategies aimed at matching residents’ skills with job opportunities in a wider range of industries.
- ***Recognizing market realities and focusing on real competitive advantages.*** It is critical that communities in the region do not try to be something they are not. The region has some very strong areas of competitive advantage that could be further strengthened. The plan must build upon these advantages rather than focus on factors in which the region will never truly achieve competitive advantage in the global economy. In the case of the southeastern Connecticut region, the greatest economic assets are marine-related. In addition, the region has a number of institutions of higher education, a strong tourism base, a technology/innovation base, and highly skilled residents. Many of the strategies include action steps that involve leveraging these assets to maximize its role in the regional economy.

- ***Promoting investments in quality of life and amenity development.*** There is growing recognition in the economic development field that quality of life factors are of increasing importance. A recent academic study on business investment decisions found: “The classic variables of land, labor, and capital as well as utility rates, taxes and the elusive business climate and entrepreneurial environment are now essentially available universally. As the focus of economic activity shifts more toward the service sector we are beginning to see other transformations. The new variable has become psychic income. This translates into a higher value placed on more intangible variables such as quality of life and amenities.” The recent work of Richard Florida further supports the notion that to attract the “creative class” to a region, the focus should be on cultivating the arts, music, nightlife, and other amenities that enhance the quality of life.
- ***Addressing economic disparities.*** Economic disparities between the urban and suburban parts of the region are economic issues that affect the economic well-being and quality of life of all residents living in the region. Moreover, it is not possible to sustain a strong regional economy with a large concentration of poor residents living in the region’s urban centers. A comprehensive economic development plan for the southeastern Connecticut region must recognize that the region as a whole can only prosper if the urban centers of New London, Norwich, and Groton are strengthened.
- ***Adhering to Smart Growth.*** Much has been written about the problems associated with urban sprawl throughout the U.S. and the need to develop investment strategies that promote development in areas already served by infrastructure and to conserve open space on the urban fringe. While this economic development strategy does not cover all of the critical policies and investments needed to implement a Smart Growth agenda in the region, the strategies and action steps are designed to conform to the general principles of Smart Growth.
- ***There is no quick fix — economic development is a long-term process.*** A region’s economic strength is linked to a complex set of factors. The economic challenges faced by the southeastern Connecticut region cannot be tied to one factor, and its continued recovery will not come from any one or two high-profile projects. It is important to remember that the focus is on economic *development*, not solely economic *growth*, and development implies more fundamental changes that take time.

Guiding Principles

In addition to the conceptual framework supporting the development of this plan, the following operational principles guide the approach:

- ***Building upon previous work.*** The CEDS builds upon some of the preexisting work and strategic thinking that has been undertaken in the region. The previous work includes an earlier CEDS completed in 1992 and, more recently, a Tourism Development Strategy prepared for Connecticut East in 2000, a Regional Transportation Plan prepared by SCCOG in 2003, *Housing a Region in Transition: An Analysis of Housing Needs in Southeastern Connecticut, 2000-2005* also prepared by SCCOG, a CEDS completed for the cities of New London and Norwich in 2003 and 2004, respectively, and numerous development plans for individual municipalities. This strategic plan integrates some of the key findings and strategic focus of these earlier efforts.

- ***Balancing municipal and regional priorities.*** The southeastern Connecticut CEDS is a regional strategy that focuses on initiatives and projects that are of regional significance. Each municipality within the region may still have other significant priority programs and projects that focus on enhancing its own community's economic vitality. The priority development projects that will be included in this document are those that fit within the goals and strategies developed as part of the CEDS process. These projects, and their relationship to the strategies, will be included as an appendix to the report and integrated with the strategies where appropriate.
- ***Strategic focus.*** Rather than developing a laundry list of all of the possible policies, programs, and projects related to strengthening the region's economy, the intent is to be strategic and to add value through focusing on a more limited set of strategic initiatives.
- ***Multi-organizational responsibility.*** While seCTer and SCCOG are the sponsors of the CEDS, the strategies and action steps involve numerous institutions throughout the region. Different organizations will be assigned responsibilities within the CEDS. A formal process will be developed to reach consensus on responsibilities and to ensure accountability.
- ***Initial stage of ongoing process.*** This CEDS is part of an ongoing strategic planning process. Most of the areas of strategic focus require further analysis and planning to ensure successful implementation. The region as a whole needs to acknowledge that to fully implement the CEDS and to make a significant difference in the direction of the regional economy will require greater investments by both the public and the private sectors. This is an investment that other comparable regions have been willing to make.
- ***The engagement and sustained commitment from a broad set of leaders.*** The region has been through many planning and visioning processes, many of which have met with only partial success. The transition from planning to implementation requires leadership, commitment, coordinated action, and risk taking.
- ***An inclusive process that reflects the diversity of the region.*** Leadership in economic development cannot be confined to one segment of a community. Much innovation emerges from the bottom-up and from the synergies created through building trust and dialogue amongst groups that often do not sit at the same table. A real commitment to bringing to the table a broad set of actors representing the various interests and diversity in the region is important.

Mission Statement and Summary of Goals

In southeastern Connecticut, a comprehensive economic development strategy must *fundamentally* seek to improve the economic lives of existing residents, to improve the region's quality of life so that existing residents will remain after they have achieved some level of economic health, and to provide the impetus to draw new residents to the region. Thus, the vision or mission statement guiding this strategic plan is the following:

Promote balanced, diversified, and sustainable regional economic growth that produces shared prosperity, encourages continuous individual achievement, and conserves our existing natural resources.

With this as a vision, the strategic planning effort has focused on the following goals that could have longer-term and deeper impacts on the quality of life for all citizens of the region:

Goal One: *Promote a more effective and efficient civic infrastructure that enhances collaboration around economic development and unites the region behind a common vision.*

Goal Two: *Ensure the continued strength of existing economic clusters while seeking to diversify the economy through the development of new employment opportunities.*

Goal Three: *Build the physical infrastructure needed to support the region's economic transformation.*

Goal Four: *Promote career ladder opportunities that can move low-wage workers into careers providing a family wage.*

Goal Five: *Enhance the regional quality of life, balancing vibrant urban centers, rural areas with open space, and sound suburban communities.*

GOAL ONE: Promote a more effective and efficient civic infrastructure that enhances collaboration around economic development and unites the region behind a common vision.

Public and private leadership in southeastern Connecticut understands that to compete economically in an increasingly global economy, businesses, institutions, and governments must join together as a region. In recent years, regional collaboration around economic development has increased considerably. However, the region's long history of independent municipalities and institutions, while a positive attribute in important respects, also complicates efforts to broaden and deepen collaboration to the degree needed to meet the region's competitive challenges. All of the recommendations in this strategic plan can only be implemented if the "civic infrastructure" that supports the economic development of the region is enhanced.

Civic infrastructure is, in effect, the backbone of economic development. It is the "operating system" that enables the development of industrial parks, the attraction of new businesses, the redevelopment of neglected buildings and neighborhoods, and the creation of a skilled and trained workforce. It is the glue that holds the elements of economic development together. By civic infrastructure we mean the relationships and the decision-making process that occur among leaders within a given region's key institutions — education, business, government, training, economic development, arts and culture, planning, and finance. And, when there is strong leadership, a unified vision, clarity of roles, and consensus around priorities, a region's civic infrastructure, by definition, is effective, and a strong economic base often is the result. On the other hand, when civic infrastructure is weak, and there is no agreement on economic vision and priorities in a region, chaos can result and economic development is left to chance.

As strong as these organizations are, and as appropriate as their programs and initiatives may be:

- there is limited region-wide consensus on where the region should be going, how it should be identified/branded, and how each organization's role fits within a larger framework of economic development effectiveness;
- the organizations sometimes have different geographic configurations leading to different regional affiliations;
- there is some overlap in programs and services and inefficiencies in how resources are being utilized; and
- there are some economic development services, such as entrepreneurial development and business retention that are not being undertaken in any consistent or sustainable manner.

The following strategies are designed to address some of these barriers.

Strategy 1: Establish a CEDS Implementation Committee

This CEDS being designed for southeastern Connecticut should form the basis of a new regional consensus on economic development priorities and organizational responsibilities. The following steps are recommended for building consensus around the three key strategy areas: economic vision, economic strategies, and organizational responsibilities. The process is admittedly time-consuming, but when it is rushed for the sake of expedience it often works against consensus building and results in consensus in form rather than substance.

1. Convene key organizations with region-wide focus.

Since this strategy is so vitally important for the region's ability to coalesce around economic development, we recommend that a small, but representative, CEDS Implementation Committee (CIC) be formed to take the leadership. The CIC should be composed of members of the CEDS Strategy Committee and should include members from the private and public sectors, and senior-level individuals from key regional organizations. The CIC should be facilitated/staffed by seCTer and SCCOG and should also include:

- SCCOG;
- regional chambers of commerce;
- regional tourism organizations;
- regional utilities;
- Eastern Connecticut Workforce Investment Board; and
- United Way of Southeastern Connecticut.

The CIC should widely distribute the CEDS report (or an executive summary of the report) to all key stakeholders in the region, with a clear indication that the report represents region-wide involvement in the development of a plan to strengthen the region's economy. The group should also acknowledge that the report will be the basis of a half-day Regional Economic Development Forum, designed to build consensus around the CEDS.

After distribution of the report, members of the group should arrange one-on-one meetings with individuals and/or small groups of individuals from the principal planning and economic and workforce development organizations in the region, as well as a representative group of senior managers from the region's major companies. At these meetings, the CIC members should review the CEDS report, solicit feedback on the report, and ask what, if anything, could be done to work towards implementation. These small intimate meetings are essential to building meaningful consensus. They should be viewed as an effort to establish trust among the region's key organizations and businesses, and as the building blocks for a shared economic vision and direction for the region.

2. Hold a one-day Regional Economic Development Forum with all of the key players from the various civic organizations. At the end of the event, there should be explicit responsibilities assigned to each strategy and action steps that are consistent with the CEDS.

seCTer and SCCOG should jointly host a regional economic development forum to formally present the CEDS to the region. The Forum should include plenary sessions as well as small group sessions. Facilitators should be used to guide the large and small group process. And, further work may be required in any areas where consensus cannot be reached (e.g., the region's economic identity). One of the major outcomes of the Forum will be clarity about organizational responsibilities for carrying out all of the action steps included in the CEDS.

3. Meet regularly to coordinate implementation of CEDS and to evaluate its progress.

Following the Forum, the CIC should put out a short implementation schedule that includes each action step, the responsibilities of all organizations, and a clear timeline. This will be used as the foundation of an annual report to the region.

4. Coordinate and assist in the implementation of region-wide initiatives.

The CIC should take the lead role in promoting and coordinating the development of region-wide initiatives. These could include the following:

- regional image campaign;
- regional tourism marketing and development;
- regional legislative/public advocacy, e.g., campaign for more equitable distribution of state casino revenues;
- regional housing initiatives; and
- regional education and training initiatives.

5. Minimize redundancy in support organizations by promoting collaboration and partnerships.

In an era of scarce and declining public resources, it is particularly important that economic development and related activities be designed to make the most efficient use of those resources that remain available. The region has already seen the consolidation of state-funded tourism and workforce development agencies that somewhat dilute their focus on the southeastern region. Regional efforts to promote increased collaboration and partnership among organizations involved in similar or complementary activities will reduce inefficiency and overlap while lessening the likelihood of additional institutional restructuring that is imposed externally without full consideration of regional interests.

The CIC should explicitly factor in this consideration when developing the region-wide initiatives such as those listed above. When developing these initiatives, regional capacity and resources should be carefully inventoried. Where regional organizations with complementary or overlapping resources are identified, the CIC should encourage these organizations to facilitate

the development of partnerships, possibly through memoranda of agreement spelling out the respective roles of cooperating organizations. In cases where regional capacity does not exist, the CIC should facilitate collaboration of local organizations or assist selected local organizations to expand their capacity to serve regional needs.

Strategy 2: Research and Design Regional Fiscal Equity Initiative

It is very difficult to mobilize local political leaders around a more regional approach to economic development. Local control is a very powerful philosophy in New England and one not easily relinquished, even on a limited basis. An aggressive move towards more regional actions would require the leadership of some of the key politicians in the region. In addition, the fiscal structure in Connecticut, with its heavy dependence on the property tax, is a deterrent to regional action. As long as property taxes remain the major revenue source to support local services, competition for economic activity amongst municipalities will only increase. When a single municipality accrues all of the fiscal benefits of development activities, there is little incentive for communities to work together to promote economic development.

There are many reasons why the residents of the entire region would benefit from increased municipal cooperation. First, in a period of scarce resources, there are many services that could be more efficiently provided on a regional basis rather than on a town-by-town basis. Second, municipal boundaries are not relevant to most employers. The private sector recognizes that an economy is regional. Since businesses are a primary “client” of many economic development initiatives and their concerns are regional in nature, working with them on a town-by-town basis is increasingly problematic. The following action steps are suggested to take these efforts to the next level:

1. Increase awareness of residents and municipal leaders about the benefits of regional action.

seCTer and SCCOG should co-sponsor a series of seminars with leaders on common issues faced by the region’s municipalities. An effort to engage leaders and the general public could lead to a better understanding of the problems of current patterns of growth and the imminent need to seek common ground towards better land use decision-making. Working together, the region can support efforts to promote change at the state level to address the fiscal issues facing the state’s municipalities that have led to the type of regional growth that is not in the interest of the region’s businesses or residents.

2. Identify and implement service-sharing projects.

A first step towards developing greater regional cooperation could be small. Any positive examples in which the municipalities of SECT work together and share resources could help build momentum for greater levels of regional activities. Service sharing could involve buying and selling of services from each other, or could involve the development of mechanisms for providing services together. In either form, service sharing can create economies of scale, thereby reducing some fiscal pressures, and can break down some of the municipal boundaries that have limited any type of regional approach to development.

The region, along with others in Connecticut, has already begun to take such steps. In SECT, the water-sharing project between the Mohegan Tribe and the towns of Preston, Ledyard, Groton, Montville, Norwich, and North Stonington is a great step in the right direction. In other parts of Connecticut, there have also been some experiments in service sharing. According to an article in the *Hartford Courant*, Barkhamsted has agreed to pay to extend Winsted's sewer line into Barkhamsted to support regional economic development. The towns of Cornwall, Falls Village, Salisbury, and Sharon are sharing the cost of a new bus service for elderly and handicapped citizens. The challenge for the towns of SECT is to build upon these initial steps.

3. Develop pilot tax sharing project.

Many states have supported inter-municipal revenue sharing agreements. Connecticut, in 2000, passed a law enabling communities to create such agreements, but municipalities have yet to utilize this authority. seCTer and SCCOG should continue actively to pursue the political support needed to implement a successful regional economic development project involving the sharing of both costs and revenues amongst municipalities in the region. The region could also lobby to have the state provide incentives in its economic development funding to projects that involve more than one municipality. Finally, in its review of each of the projects that have been identified as part of this CEDS (see Chapter V), seCTer and SCCOG should consider whether there is any opportunity for an inter-municipal agreement.

Tax Sharing Projects: Models for Southeastern Connecticut

Lewiston and Auburn, Maine — Tax Sharing on Multiple Projects. The two cities of Lewiston and Auburn in Maine started a tax sharing program in 1979, and have been increasing the amount of city-to-city cooperation ever since. Their first tax sharing project was an industrial park near the jointly controlled Lewiston-Auburn Airport. Together, they received a federal Economic Development Administration grant and both backed bonds in the amount of half the required match. Because both had paid to develop the project, they agreed that both should receive the benefits of development on the site. Therefore, while Auburn, the host city, receives 30 percent of the tax revenue for service provision, the remaining 70 percent is split 50/50. The bonds were completely paid off in 10 years, and both communities now realize annual tax proceeds from the park. The project also involved extending utilities to the site. This provided additional development benefits, which also have been shared. If the new utilities are used by other businesses, and if the development is in a mutually agreed upon "sphere of influence," then taxes from these developments are also shared.

Dayton, Ohio's ED/GE (Economic Development/Government Equity) Program. Montgomery County, Ohio, has a regional tax-sharing program that is not limited to individual developments. The impetus of the program was a new state law that allowed counties to issue a one-half percent sales tax. In 1991, the County Commission agreed that, on an annual basis, it would use \$5 million of the proceeds of the tax to capitalize an economic development fund. In order to receive any of the funds, municipalities had to become part of a voluntary regional tax sharing plan. The idea of tax sharing was to ensure that all jurisdictions benefited from growth through the mechanism of receiving a share of the increase in taxes created by new growth. The results of investments from the economic development fund and of regional cooperation fostered by the program have been significant. Above purely financial results, joint participation in the administration of the program has led to a significant cooling of old town-to-town animosity. There has been a number of new regional initiatives since the program began, and at least one side tax sharing agreement between two towns that were initially competing for a bank back-office facility.

Strategy 3: Design and Implement a Regional Image Campaign

Cities and regions have their own form of goodwill. It works its way into the perceptions of individuals and influences where people choose to live, where they vacation, where they do business, and where they invest. The image of a place – its identity – has value...Civic identity also plays an important role in shaping regional strategy because it helps the community prioritize investment options. Without some agreement on our identity, we are likely to suffer the challenge of trying to be all things to all people...³

Southeastern Connecticut's tourism industry, including its two major tourism organizations, has worked to market the region in a coordinated fashion and to establish a regional image through the "Mystic Places" brand identity. Yet, the region continues to suffer from an "image gap" — perceptions from both within and without often do not recognize all of the region's many positive qualities. To counter this problem, the region should build on tourism marketing efforts by developing a broader regional image campaign that can be incorporated into other forms of marketing, including business and entrepreneurial recruitment and resident and workforce attraction. A regional image campaign can also serve to promote a sense of regional identity and coherence for current residents, and help the region to prioritize its public investments.

"Location branding" efforts are being undertaken by an increasing number of cities and regions, drawing in part from the success of branding techniques in the corporate world. These efforts involve more than simply slogans and marketing campaigns. They begin with a community process of inventorying the region's attributes, establishing objectives, and developing themes that reflect the region's character and appeal. This exercise can then be translated into development of slogans, graphics, and descriptive text that can be used in various forms of marketing. Organizations involved in these branding efforts must work together closely to coordinate their messages, materials, and marketing strategies.

1. Undertake a charette focused on regional "themes" to promote through an image campaign.

The CIC should organize an initiative to develop a regional image campaign. As an initial step, the initiative could conduct a regional fact-finding exercise (e.g., public opinion surveys, focus groups) involving both local and non-local sources, to identify key attributes that contribute to the region's appeal as well as those that create negative perceptions. Collection and analysis of this information could be followed by one or more regional "charettes" with broad participation by all segments of the community. The charettes would help the region brainstorm and develop consensus around the themes that should be emphasized in better shaping the region's image.

³ Gregory Stoup in *Image of the Region Can Have Great Worth*, Center for Regional Economic Issues, Case Western Reserve University, May 2003.

2. Develop a common theme across regional marketing and promotional material.

The results of the charette could be refined and applied to the development of a regional image campaign aimed at key target audiences (e.g., visitors, entrepreneurs, targeted industries, retirees, etc.). While various organizations could develop their own marketing initiatives based on their missions, roles, and constituencies, these various initiatives could be coordinated through common, logos, themes, graphics, etc., that would link them together in promoting a coherent regional image. This effort could potentially tie in with the state's "You Belong in Connecticut" campaign.

Models of Regional Image Campaigns

The *Hartford Image Project* (HIP) is a strategic initiative by leading Hartford civic organizations, with the support of the city, state, and private partners, to strengthen the promotion of Hartford through collaborative marketing around a unifying new logo and themes. The HIP started as an intra-regional initiative to improve the image of the city of Hartford in the Greater Hartford region, but has since expanded to marketing the region as a whole as a tourist destination, business location, and a higher education center. The HIP is managed by the MetroHartford Alliance, the region's lead economic development organization. Members include the City of Hartford, Greater Hartford Tourism District, Greater Hartford Arts Council, Greater Hartford Convention & Visitors Bureau, Capital City Economic Development Authority, Waterford Development, State of Connecticut Office of Tourism, and Hartford 2000.

The *Pittsburgh Branding Initiative*, a collaboration of several southwestern Pennsylvania regional economic development and tourism organizations, has three goals: 1) to align perceptions of the Pittsburgh region with its positive "realities" and promising vision for the future; 2) to gain the region a place among the competitive set of mid-tier fast growing regions as measured by increased tourism, talent, and business growth; 3) to provide a blueprint for integrated messaging and a focused strategy for future investments and marketing of the region. The initiative has conducted market research and established an innovative Website, the Pittsburgh Region Marketing Toolkit, for use by organizations involved in regional marketing. The Website explains the concept of location branding, and provides research data, themes, descriptive text materials, and graphics for use in marketing activities. Materials are sorted into three target markets – talent (e.g., students, professional workers, entrepreneurs), tourists, and site selectors.

Strategy 4: Build a More Diverse Leadership Base

While SECT has a strong leadership base that sits on the boards of many of its civic organizations, this base could be strengthened in two fundamental ways:

- increase the diversity of the regional civic leadership base; and
- increase participation of younger residents in regional civic organizations.

To build its leadership base, the CIC should undertake the following actions steps:

1. Enhance and broaden the community leadership programs and include a mentoring component.

This action step is directed at building a new generation of leaders by developing a program focused on nurturing new leaders and forming a one-on-one relationship between older, more seasoned leaders with younger people or individuals who have not felt comfortable participating in regional civic organizations. While the Chamber has a leadership program, it could be enhanced through a mentoring component. There are many models of such efforts throughout the country. For example, Big Brothers and Big Sisters have mentoring programs that are designed to give young people the tools they need to play a leadership role in their community. A community leadership program would have the following characteristics:

- It would be housed in a well-established organization with credibility and capacity (i.e., one of the regional chambers or the United Way).
- It would involve local colleges and universities in training and support efforts.
- It would target young adults, retired individuals, and minority residents.
- There would be a clear set of outcomes and benchmarks.
- There would be significant outreach and a public relations effort to generate excitement.

Brushy Fork Leadership Development Program

The Brushy Fork Leadership Development Program is an outreach arm of Berea College in Berea, Kentucky. The program has involved more than 950 residents in six states in projects aimed at fostering leadership. The program brings together a diverse mix of existing community leaders with individuals who have not been involved in civic organizations in the past. The group attends a weekend program at the college that is focused on topics such as how to run a meeting and understanding the local economy. Following the weekend, team members meet biweekly to implement a specific community project. The projects receive ongoing support from staff at the college. In East Kentucky, the project has created a Leadership Network. According to an article on the effort (*Appalachia*, July-December 2003), "Each year youths are selected and trained, then participate on local community boards such as library, school and tourism boards."

2. Encourage participation of community-based groups and organizations representing the minority community in regional civic activities.

In the course of completing this CEDS, it became clear that while there was significant outreach to representatives of community organizations and to individuals representing the diversity of the region, participation of these groups was not as great as hoped. The CIC needs to reach out more effectively to these groups to ensure that they are more fully engaged in the regional economic development process. As a first step, the leadership should make individual calls to strongly encourage greater participation of various community organizations in future efforts.

GOAL TWO: Ensure the continued strength of existing economic clusters while seeking to diversify the economy through the development of new employment opportunities.

Development policies and programs that focus on increasing the competitiveness of the region's existing employers and generating new jobs through business startup and expansion are at the core of any economic development strategy. Southeastern Connecticut already has a strong infrastructure focused on job generation. Through the efforts of seCTer, SCCOG, the EWIB, the region's chambers of commerce, economic development agencies of the cities and towns, and the region's colleges and universities, there is already a strong base of programs that is critical to economic development.

Existing, more broad-based economic development efforts all need to be further supported and promoted as the region seeks to strengthen its economic base. In addition to continuing to support existing efforts focused broadly on business development, the following recommendations are focused on additional action steps that could be taken within the region to support the further development of some of the region's key economic clusters.

Strategy 1: Promote Small Business Development and New Entrepreneurship

Economic development can be defined as the business of making targeted investments to expand the local economy. A key element of this activity is encouraging and supporting local businesses to start up, develop, and grow, and perhaps become large companies. In a typical community, most new jobs come from either startup businesses or local expansions. Therefore, identifying ways to support existing small companies and new entrepreneurship is a critical element of economic development.

Small businesses and new entrepreneurs in southeastern Connecticut already have access to considerable resources to help them start and growth their businesses. These include the following:

- **Management and technical assistance:** The *Connecticut Small Business Development Center* office at Avery Point assists startup companies with business plans, financial analysis, loan packaging, marketing plans, and management assistance through workshops and one-on-one assistance. The Old Saybrook/Mystic Chapter of the *Service Corps of Retired Executives (SCORE)* offers counseling and workshops on a range of business issues. *The Greater Mystic Area Chamber* supports Business to Business (B2B) marketing activities and has established a business resource center at its Mystic office.

- **Financing:** There are 13 banks with offices in New London County, the largest of which (as measured by deposits) are Citizens Bank, People's Bank, Chelsea Groton Savings Bank, Fleet Bank, Liberty Bank, and Dime Savings Bank of Norwich. Many of these banks participate in state and federal financing programs. In addition, seCTer operates a *Regional Revolving Loan Fund* that provides loans at or below market rates and terms in partnership with other lenders. The program is targeted particularly to manufacturing and processing businesses. seCTer also operates a *Fisherman's Loan Fund and Technical Assistance Program*, which assists the region's commercial fishing industry with loans and accompanying financial management assistance.
- **Affordable space:** seCTer operates a small business incubator in New London that offers low-cost space and shared services to startup businesses for up to three years.
- **Government procurement assistance:** seCTer operates the *Connecticut Procurement Technical Assistance Program (PTAP)*, which assists small companies with federal and state government procurement through counseling, workshops, information, and a computerized bid matching system.

In addition to these regional resources, there are a number of programs providing information, management, and technical assistance, and financing through state government agencies and nonprofit organizations. Financing sources include Connecticut Development Authority (CDA) financing programs targeted to a wide range of small- and medium-sized businesses, Connecticut Innovations Inc. (CII) seed and venture financing for technology-based companies, Connecticut Economic Development Fund (CEDF) financing targeted to low-income entrepreneurs and distressed communities, and SBA loans and loan guarantees. Information and technical assistance sources include the Connecticut Economic Resource Center's (CERC) Business Response Center and Connecticut Light & Power's Business Solutions Center. This is not to mention the many accounting, legal, marketing, management, and technology assistance services available in the private marketplace.

Yet, even with these resources, bankers and business assistance providers still note that the region remains under-resourced relative to other regions of the state, particularly more urban regions. Among the resource and program gaps are a shortage of startup financing, inadequate staffing of business assistance programs, limited networking opportunities for small entrepreneurs, and the absence of programs targeted to minority and immigrant entrepreneurs.

The region's primary sources of business assistance, seCTer and the Small Business Development Center, should take the lead in an effort to strengthen and better coordinate the region's business assistance programs. They could begin by forming a working group that includes representatives of the regional chambers, banks, major utilities, and educational institutions with business education programs. The working group should develop a strategic plan that identifies specific small business service needs, sets priorities for the development of new services, and establishes more effective service delivery mechanisms.

1. Establish a One-Stop Business Resource Center.

The region should consider establishing a more convenient one-stop approach to service delivery. Small business owners and new entrepreneurs would find a one-stop center extremely

helpful. Most of these individuals generally do not have the resources or the time to inventory and access business assistance programs. When they need assistance, it has to be readily available and easy to access. Similarly, new entrepreneurs have limited understanding of the various assistance providers. A more centralized approach to business assistance would be a step forward for small and new entrepreneurs. This could include a number of elements:

- developing a single regional web portal for business assistance programs, services, and events. The site could include information about banking services, state and local development finance programs, government and institutional procurement, legal and accounting services, educational programs, and individualized counseling;
- joint marketing of services by business assistance providers;
- co-locating staffing at one or two convenient “gateway” locations — the SBDC, in particular, is in a somewhat isolated location at Avery Point, and should be relocated if possible. Co-location could result in sharing of space, support staffing, equipment, and utilities, freeing up more resources for direct services;
- improving access to and supplementing existing management and technical assistance resources through such mechanisms as consulting networks and mentoring programs;
- an expanded program of educational workshops that more fully taps regional business professionals and educators;
- referral to private business assistance professionals, such as accountants and attorneys, willing to provide some number of hours at subsidized rates;
- brokering of technical assistance and financing from other public and private sources.

2. Establish a Southeastern Connecticut Small Business Network.

The Business Resource Center, possibly in partnership with one of the regional chambers, could organize a Southeastern Connecticut Small Business Network. Networks and associations are key elements of growing a new business because they often serve as a vehicle for making contacts within the business community, for developing sales leads and new markets, for learning about best business practices from other business owners, and for building strategic alliances with other companies. The Center could provide the most critical ingredients of making this happen — staff and organizational support. The Network should develop and sponsor initiatives that directly support entrepreneurship. Such initiatives could include the following:

- informational/educational forums and events;
- networking events;
- Business to Business (B2B) opportunities;
- a newsletter and events calendar;
- venture forums bringing people with promising business ideas together with other entrepreneurs, potential financial backers, and other sources of business assistance;
- a regular series of entrepreneur appreciation events to spotlight local businesspeople who are making a contribution to the regional economy;

- a promotional campaign to support local companies and create excitement about the range of products and services offered by local entrepreneurs;
- engagement with the local media to enhance coverage of local entrepreneurs and topics of interest to the emerging entrepreneurial community.

If interest were sufficient, sub-groups of specific kinds of businesses (e.g., home-based businesses, technology startups, retail businesses) could also be established.

3. Develop an initiative to support immigrant and ethnic entrepreneurship (part of the larger Regional Newcomer Initiative).

The arrival of many recent immigrants in the region brings opportunities along with challenges. Under Goal IV below, we recommend the establishment of a Regional Newcomer Initiative, a multi-faceted effort to help newcomers become full participants in the region's social and economic life. One important component of the initiative should be stronger support for immigrant and minority entrepreneurship. As nationally syndicated columnist and urbanist Neal Peirce notes in a recent column,⁴ "Cities such as Pittsburgh, Schenectady, and Cleveland are vying for new immigrants in large part because of the entrepreneurial energy and talent they bring with them." And, a 1997 study of immigrant entrepreneurship sponsored by the Carnegie Endowment concludes, "Impressionistic data suggest that immigrant firms...are sufficiently powerful in the aggregate to have revitalized many neighborhoods, particularly in hard hit urban areas."⁵

Nurturing the immigrant and minority business community can make an important contribution to a strong and vibrant regional economy and greater economic opportunity in the years ahead. Yet, today, there are few minority firms in the region and fewer still have entered into the business mainstream. There should be a larger, stronger, and far more diverse mix of minority businesses incorporated into the fabric of the region's economy.

As a starting point, seCTer and the SBDC should jointly conduct a needs assessment by undertaking outreach to immigrant and minority entrepreneurs and organizations such as Centro De La Comunidad and Thames Valley Council for Community Action that work with the immigrant and minority communities, and other immigrant and minority leaders. Assembling a working group to design the initiative should follow this. The initiative could include a number of components:

- education on local business regulations and customs;
- help with incorporation and legal issues;
- connections to management and financial resources;
- mechanisms for increasing contracting and partnership opportunities with major corporations and the public sector;
- ethnically/linguistically matched mentors;
- establishment of immigrant credit associations replicating practices in native countries;

⁴ *Cities Scramble for Immigrants*, May 16, 2004.

⁵ *Research Perspectives on Migration*, Carnegie Endowment for International Peace, January/February 1997.

- establishment of ethnic merchants' associations.

Informational materials, educational seminars, and counseling could be provided in foreign languages, where necessary and practical.

4. Target entrepreneurs in regional marketing campaigns.

An economic development strategy that is based on attracting people rather than businesses is still a relatively new concept. A growing number of smaller communities and regions have developed plans for attracting those individuals who are technologically sophisticated and interested in leaving urban areas. These include Kerrville, a suburb of Austin, Texas, which has produced marketing materials specifically to market the community to high tech home-based entrepreneurs, and Telluride, Colorado, which has sought to attract high net worth individuals who will freelance, telecommute, or start a business locally. The Center for the New West, a think tank in Denver, Colorado, defines these footloose entrepreneurs as "Lone Eagles." Lone Eagles, according to the Center, are freelance professionals who are abandoning life in large cities and their positions at 9 to 5 jobs in the corporate world and are moving back to small town America or adjacent rural areas. Lone Eagles are "writers, analysts, brokers, consultants, manufacturers reps, and others who live by their wits and connect with the outside world using faxes, modems, and airplane tickets." The Center has delineated some characteristics of communities that are most attractive to Lone Eagles including:

- proximity to an interstate highway — within 15 minutes;
- proximity to an airport — within 60 to 90 minutes;
- resident physician and good health facilities;
- access to express mail;
- access to science and technology talent most typically present through a college, university, community college, or think tank, or technologically intensive business or industry; and
- access to advanced telecommunications.

With its small-town atmosphere, advanced telecommunications, access to transportation, and a wide range of nearby cultural, entertainment, and recreational amenities, southeastern Connecticut can be an attractive location for these lifestyle entrepreneurs. seCTer, with its lead role in regional marketing, should take the lead in developing a marketing campaign targeted to these entrepreneurs, with a focus on urban regions in southern New England and New York City. This marketing campaign should be tied into the regional image campaign described in Strategy 3 of Goal One.

5. Develop a Business Calling Program.

There is no organization within the region that is explicitly assigned responsibility for ensuring that current employers remain in the region. The region should develop a more proactive approach to meeting with current businesses and creating a stronger message that the region's political and business leadership is ready to respond to their needs. A business calling program should be established through which teams of local government, utility, economic

development, and workforce development organization representatives make periodic visits to local companies. Such a program can be extremely useful for two reasons. First, it can be used to identify problems, direct companies to existing resources, identify potential areas of growth, and anticipate future labor force needs. Second, and more generally, it facilitates a more productive and cooperative relationship between the public and private sectors.

6. Promote youth entrepreneurship.

The region can cultivate a culture of entrepreneurship by promoting the incorporation of entrepreneurial education into the high school curricula. That way, as students begin to consider their post-secondary education or career plans, self-employment is at least part of that decision. Junior Achievement is one such organization that has traditionally helped students develop business skills. There are other training programs that could be developed either in addition to or instead of Junior Achievement.

There are a number of national nonprofit institutions such as the National Foundation for Teaching Entrepreneurship (NFTE) that have developed curriculum and training specifically to address this need. While these organizations have primarily focused their energies on low-income urban areas, the models developed are applicable to a variety of community types.

Strategy 2: Support the Growth of the Maritime Cluster

As described in Chapter II, SECT's maritime cluster comprises a very diverse set of activities, including military facilities, maritime education and research, commercial passenger and cargo shipping, manufacturing of maritime products ranging from sails to submarines to maritime instruments, and commercial and recreational fishing and boating. There are also a number of organizations involved in promoting, developing, and regulating maritime industries and infrastructure. These include:

- the *Thames Maritime Coalition*, a consortium of companies, support organizations, government agencies, and educational institutions that comprise the region's marine industry. Its mission is to provide a forum for addressing issues of mutual concern to stakeholders along the Thames River and to also function as a United States Coast sanctioned Harbor Safety Committee;
- the *Connecticut Cruise Ship Task Force*, a body of local maritime industry, tourism industry, and state and local government representatives seeking to promote increased cruise ship activity in the Port of New London;
- the *Subase Realignment Coalition (SRC)*, which represents the region in the 2005 BRAC process;
- *seCTer*, which operates the Fisherman's Loan and Technical Assistance Program, and provides staff support to the Maritime Coalition, Cruise Commission, and SRC;
- *CONNDOT's Bureau of Aviation and Ports*, which owns and oversees the operations of the Port of New London;
- *SCCOG*, which is responsible for the region's transportation planning;
- the several public and nonprofit *maritime research institutions*;

- SECT *municipalities* with harbor and port facilities.

These organizations are already engaged in a wide range of activities to support the region's marine cluster. Regional economic development efforts should support these activities and supplement them with a few additional strategic initiatives.

1. Develop a regional maritime infrastructure initiative.

In order to support the continued viability and further development of the maritime cluster in an orderly and coordinated fashion, regional organizations that play leading roles in the cluster should work collaboratively to develop and implement a region-wide plan for marine-related infrastructure development, maintenance, and improvement. This effort would comprehensively assess infrastructure needs and develop a plan that seeks to reconcile competing demands and provide a balanced and equitable plan of investment and development. The plan could address a number of key issues:

- promoting waterfront development while ensuring preservation of marine uses;
- maintenance and expansion of cargo and passenger port facilities (e.g., to better accommodate cruise ships);
- improvements to waterborne transportation and development of intermodal water/land transportation links;
- preservation of facilities for the commercial fishing industry;
- coordinating and balancing commercial passenger, freight, and recreational uses; and
- coastal and marine resource management, including aquaculture development.

2. Promote R&D and commercial applications related to maritime security.

While efforts to promote commercial spin-offs of the region's considerable maritime research infrastructure have borne limited results in the past, potential commercial applications should continue to be examined in light of changes in research focus, development of new technologies, and the emergence of new market opportunities. In particular, the new technology demands of homeland security related to the nation's ports, waterborne vessels, and waterways provides an opportunity for jointly applying the defense and civilian maritime R&D already underway in the region to develop technology and products that address homeland security needs.

There is already considerable research activity underway in the region related to maritime security. This is a major focus of the Coast Guard Research and Development Center, which also has provisions for cooperative research and development agreements (CRADAs) with private companies, governments, universities, and public interest groups. Research being conducted at the Institute for Exploration on deep submergence technologies may also have security applications. And, facilities and equipment at the National Undersea Research Center in Groton, may provide useful support for research activities. In the private sector, a number of companies have developed cutting edge products related to maritime security. These include JMS Naval Architects & Salvage Engineers in New London, which provides a range of marine casualty prevention and response services, PEL Associates in Groton, which is developing low-cost sensors for shipping containers and port security (and is an industrial affiliate of UConn's Marine

Sciences and Technology Center), and MPRI Ship Analytics in North Stonington, which has developed incident management software to respond to disasters including terrorist attacks.

One promising approach to building on this base would be to establish a ***Center of Excellence for Maritime Security***, which brings together regional research and educational institutions with relevant programs and focus, and has the capacity to leverage the resources of individual institutions to promote a more integrated approach to maritime security research and education. The Center would support research scientists and engineers seeking to develop and commercialize new products as well as existing regional companies already working in this field. The Center could play a number of roles:

- identify areas of opportunity for research and development funding related to maritime security;
- inventory all relevant maritime research in the region with civilian or dual use applications;
- evaluate commercialization potential of new technologies;
- support companies in procuring federal funding for R&D and product commercialization (e.g., through the Department of Homeland Security and the SBA's Small Business Innovation Research and Small Business Technology Transfer programs);
- structure cooperative research projects between companies and research laboratories, including joint research between lab and company personnel, and use of laboratory facilities and equipment;
- provide business management and technical assistance to scientists and engineers seeking to commercialize research through new firm startups;
- develop a licensing program to assist individual research facilities with technology licensing;
- develop related educational programs.

seCTer could convene a working group of the various institutions and some of the leading regional companies in the field to explore this concept. If interest is strong enough, a planning process could be initiated. The initiative could be of sufficient national importance to attract significant funding from the Department of Homeland Security.

3. Enhance linkages between the educational system and maritime activities.

The continued health of the region's maritime cluster will depend in part on the availability of a skilled professional and technical workforce. The cluster offers skilled and well-paying jobs in a number of occupations, including vessel operation and repair, scientific research, engineering, skilled manufacturing, resource conservation and management, and corporate management. Regional education and industry leaders should explore ways to promote maritime career development in the region's K-12 and higher education institutions. There are already a number of institutions providing sophisticated educational programs targeted to young people, including UConn at Avery Point, Mystic Seaport, Mystic Aquarium, and Project Oceanology. The region should build on these resources by developing more education and career exploration

programs in the region's public school systems. One possible approach would be to develop a *regional maritime magnet high school*.

Strategy 3: Ensure the Continued Strength of the Region's Defense-related Facilities and Companies

The 2005 round of the Base Closure and Realignment Commission (BRAC) will make recommendations to the President and Congress on the future of every U.S. military installation, including the Groton Subbase and other Connecticut military facilities. Based on a recent study of excess base capacity, this round of closures could lead to the reduction in base capacity of up to 25 percent. As described in Chapter II, the Subbase closure and potential resulting closure of EB's Groton submarine building and repair facility could result in the loss of up to 23,000 jobs and \$1.1 billion in personal income. Realignment and closure decisions will be finalized late in 2005 unless rejected by Congress.

Other smaller facilities appear less vulnerable to closing, including the Air National Guard facility at Groton Airport, which has a state-of-the-art helicopter maintenance and repair facility, and the Army National Guard regional training center at Camp Rowland, which is becoming a regional training center for 8-9 states.

In anticipation of the BRAC process, many states with major military facilities have organized and funded efforts to monitor developments and advocate for the retention of their facilities with the BRAC and federal elected officials. In southeastern Connecticut, the Subbase Realignment Coalition (SRC) represents the region in the 2005 BRAC process as it did in the 1993 and 1995 rounds. The SRC is composed of volunteers who are private citizens, civic/business leaders, government officials, and elected representatives. It is housed and staffed by seCTer. The coalition has had very limited resources to support its efforts, but in March received a state commitment of \$350,000 to be used primarily to hire a consultant to monitor the BRAC process in Washington and activities in competing states.

Although the SRC was successful in the 1993 BRAC round, the apparent high vulnerability of both the Subbase and the EB facility, along with the relatively low level of state support, may put it at a disadvantage in this round. Several states, including Virginia and California, where competing facilities to the Subbase and EB are located, have established statewide BRAC committees and provided them with substantially more funding. States such as North Carolina and Pennsylvania have committed as much as \$2 million to their efforts. In Arkansas, the state committed \$6 million to the construction of an aviation school adjacent to an air base that is under consideration for closing.

In neighboring Massachusetts, the lobbying effort to preserve Hanscom Air Force Base and the Army Soldier Systems Center in Natick is being led by the Mass High Tech Council. The Council has formed a high-level leadership team, composed of senior political figures including Governor Romney and Senator Kennedy, and has set a fundraising goal of \$2.5 to \$3 million to support lobbying activities. Two state-funded Washington-based lobbyists are also engaged in this effort.

In light of the critical regional economic role of the Subase and EB, and the state's relatively small commitment to the effort both in terms of funding and prestige, the region should review its strategy and the efforts of competing states in order to determine whether it is necessary to advocate for additional state-level support.

Strategy 4: Promote the Region's Arts and Cultural Strengths as a Regional Economic Engine

While the development of arts and cultural activities has been long recognized as a critical component of the regional economy and quality of life, the region has not yet fully realized the full economic potential of its creative sector. The focus to date has been on the importance of arts and cultural development to improving downtown vitality, to bringing in tourist dollars, and to improving the region's overall quality of life. These are extremely critical justifications for supporting the further development of arts and cultural activities within the region. However, there has not been sufficient recognition that nonprofit arts and cultural institutions are just one part of the region's "creative cluster."

To further support the growth of this cluster, the following action steps are recommended:

1. Establish a regional creative cluster council.

While many of the regions in Connecticut, as well throughout the nation, have regional arts and cultural councils, such an entity does not exist in SECT. While there is some interest at the state level in helping to establish such an entity in the region, SECT could be the first region in the state to go the next step and create a broader "SECT Creative Economy Council." This Council would include not just the region's strong nonprofit cultural institutions, but representation from individual artists and performers, commercial venues presenting cultural events, commercial businesses that are involved in the production or distribution of creative products, and representation from educational institutions. The purpose of this Council would be to support the further growth and development of creative activities within the region and to help to "brand" the region as a center within the creative economy.

A regional council could be associated with the New England Creative Economy Council, a diverse group of business, government, and cultural leaders that supports New England's creative economy by providing unified leadership and guidance for a variety of initiatives. Throughout New England, communities have begun to affiliate with the Council and to promote a common understanding of the role of arts and culture in the economy. A SECT Creative Economy Council could be a center for this activity in Connecticut. There are a number of individuals and organizations within the region that could take up this challenge.

We would propose the following steps in the process:

- seCTer should sponsor a meeting that brings the key stakeholders to the table to discuss the viability of such an effort. Officials from the state of Connecticut's Commission on Culture and Tourism should be invited, as well as a representative from the New England Creative Economy Council. Local leaders such as Alva Greenberg, Jane Glover, Sheila

Tabakoff, and Steve Sigel could be contacted to play a leadership role. If there is sufficient interest, an initial “conveners” group should be established.

- The conveners, with the help of seCTer, should oversee an inventory of all artistic/cultural facilities, enterprises, and individuals in the arts and commercial creative sector.
- Meetings should be held with key colleges and universities in the region with programs related to creative industries. Of most relevance is Connecticut College’s Ammerman Center for Arts and Technology and the Lyme Academy. These two institutions could play a leadership role in the effort and their resources and students could be part of any effort to grow this cluster.
- The Council could help to identify opportunities for new enterprise development in emerging creative industries such as entertainment technology.
- The Council could work with the SBDC to develop a marketing assistance program focused on creative businesses. In addition, the entrepreneurial development activities discussed earlier could be marketed to creative workers and students in post-secondary fine arts and commercial arts institutions and programs.
- The Council could work with the cities of New London and Norwich to explore the creation of a “creative district” with buildings that house small companies and cultural entities related to the creative sector, i.e., see European models.

Creative District Projects: Models for Southeastern Connecticut

THE POINT, a community development corporation based in the Hunts community of South Bronx, has successfully harnessed the creative talents of community residents to fuel entrepreneurship, education, and community rediscovery. In a community beset with a history of poverty, crime, and poor quality education, The Point has been driving change—social and economic—through the arts. The Point’s community activities are primarily two-pronged:

1. Providing art instruction (performance, visual and literary) and showcasing performances and community arts through its “Live From the Edge” Theater (a 220- seat performance space, which also serves as a neighborhood gathering place and performing arts training center) and visual arts workshops. Children participate in free after school projects where they receive instruction.
2. Incubating arts-oriented entrepreneurship at a special facility. Tenants include muralists with corporate contracts, a restaurant serving soul food, and a PR firm specializing in the nonprofit sector, among others.

THE CUSTARD FACTORY QUARTER IN BIRMINGHAM, UK, was a derelict factory area that was purchased by a privately-owned development cooperative and converted initially into space for artists. It is now a thriving quarter in the city, housing art galleries, meeting rooms, dance studios, clubs, exhibition spaces, and restaurants. Now a £6million second phase, termed Gibb Square Development, is being launched for a wired, extended creative community. The ripple effect of the venture is also evident in the revitalization of neighboring areas, where a new luxury hotel, studio/apartments, a riverside walk, a new bridge, a perfumed garden for the blind, and a 40,000-square-foot international design/exhibition center have been established. The Custard Factory operations are concentrated in the following areas: providing living and working quarters; providing avenues and space for retailing and performance; serving as a venue for learning; providing resources for professional development; and facilitating interactions between creative enterprises professionals and community projects.

2. Improve regional marketing of cultural programs and events.

In Chapter III, the impressive array of arts and cultural resources was identified. This listing however, did not include the large number of creative individuals who work out of their studios or homes within SECT. While there are many sources of information on the region's cultural events, there is no one place to go to explore the region's arts and cultural events and activities. As part of its tourism promotion activity, as well as to support the recommendations on the region's quality of life (see Goal Five), efforts should be made to improve how the existing resources are marketed, both within the region and to tourists. Potential areas of focus include:

- development of a more comprehensive, widely used, and widely visible regional arts calendar (website and/or print publication);
- promotion of greater coordination of arts programming (higher education, nonprofit, private, for-profit);
- the development of a visual map that identifies the region's galleries and artist studios;
- a *regional* open studios and gallery weekend that focuses on the region's artistic talent.

3. Develop artist live-work space in downtowns and old mill buildings.

There are many buildings in SECT that would be of significant interest to artists looking for live/work space. When the cost of living in New York City and Boston skyrocketed, artists began to look at alternative places to live and to work. Communities such as Providence, and North Adams and Lowell in Massachusetts, have begun to identify artists as a potential market for their vacant space downtown, as well as potential developers of old mill space. There are a growing number of examples of successful efforts to develop and market sites to artists for live/work space. In North Adams, a small city in the Berkshires that is home to the Massachusetts Museum of Contemporary Art, zoning was changed to allow for live/work studio lofts in large mills. A developer announced plans for a 120,000-square-foot building to be sold as 36 live/work units and seven or eight retail work only studios and galleries. The entire project was sold out within months. Efforts in Lowell to develop artist space have met with similar pent up demand. Both New London and Norwich have numerous properties that could be similarly developed.

To encourage artist live/work space, both New London and Norwich should do the following:

- identify potential sites;
- identify potential incentives to promote reuse (see Providence model below);
- pursue feasibility funding for pilot sites;
- implement zoning allowing live/work units in appropriate areas;
- market artist-friendly housing regionally and even nationally.

Providence, Rhode Island, Cultural District

Through a combination of circumstance and planning, Providence has reinvented itself as a city that is attractive to young professionals and as an alternative location to Boston for companies that are employing young professionals. A part of that rebirth has been the development of a cultural district. Two of the key local assets for the city of Providence are the presence of Brown University and the Rhode Island School of Design (RISD). The presence of these institutions, one explicitly oriented towards the visual arts, has been a critical foundation towards helping an arts and culture driven economic development strategy succeed in Providence. The economic development strategy for the city of Providence has been able to take advantage of these assets with the goal of making the city a center for the creative economy.

The *Providence Arts and Entertainment District* was formally established by the city in 1996. A wide variety of tax incentives is offered within the district to encourage conversion of property to residential uses and participation in arts and culture activities. The tax incentive legislation, passed by the Rhode Island State General Assembly, allows artists who live and work in the district exemptions on both state income tax and on the profits from sales of their artwork. This includes artistic endeavors in the fields of literature, film, photography, sculpture, music, paintings, prints, or dance. In addition, people who buy these works are also exempt from paying state sales tax. The city also enacted special zoning for the area intended to preserve its historic character. As would be expected based on the incentive program, there is also a significant amount of studio space in converted mill buildings. The Cultural District encourages all kinds of artistic activity from theatrical performances, mainstream and alternative, nightclub entertainment, and visual arts.

In addition to the tax incentives, the city of Providence has an active plan for coordinating and encouraging artistic activity in the city. The city sponsors a website that tracks a variety of artistic activity in the district in partnership with AS220 (a local arts organization and developer of mixed use space). There are a number of citywide events that are coordinated through this organization from district parties to film festivals to open gallery nights. The city has also recently established a Department of Art, Culture, and Tourism. This department “ensures the continued development of a vibrant and creative city by integrating arts and culture into community life while showcasing Providence as an international cultural destination.”⁶ This is a cabinet level position in the city government that was designed to represent the interests of the arts community. There is an explicit acknowledgement by the city of Providence that arts and culture are critical to its economic development strategy, not only through tourism, but also because of “the tremendous potential of arts, cultural and creative workers as engines of growth and future development for the city as a creative hub.”

Strategy 5: Further Support the Region’s Tourism Industry and Ensure that its Development Provides Maximum Economic Benefits for Residents and Businesses in the Region

As described in Chapter II, tourism is the dominant industry cluster in the region, with upwards of 30,000 jobs and sales of more than \$3.7 billion. The two casinos are responsible for about two-thirds of this activity, with the remainder comprised of maritime-related, cultural heritage, and recreational tourism. The tourism industry is also the region’s most well organized, with two regional tourism development and marketing organizations, and support from the regional chambers. The industry also has the benefit of considerable research conducted by regional and statewide tourism organizations and the completion of a comprehensive tourism development strategy by Connecticut East in late 2000. The challenge for the region lies not so much in further expanding the industry, but in maintaining its health and vibrancy through continued investments in tourism venues, related infrastructure, marketing, keeping pace with

⁶ From its web site at: <http://www.providenceri.com/ArtCultureTourism/>

evolving market trends, and creating value through increased “synergies” among industry segments and with adjoining regions.

1. Update region-wide tourism development and marketing plan and build consensus on implementation priorities.

In light of the fundamental changes that have occurred in the tourism industry since completion of the region’s last tourism development strategy, particularly since 9/11, it is an opportune moment for the region to revisit and update the strategy. First, the recommendations in the prior strategy should be reviewed to assess what progress has been made in implementing the strategy, and what has and has not been effective. Second, an analysis of recent trends in the tourism industry nationally and developments within the region and in competing locations should be undertaken. Third, an inventory and assessment of current tourism development and marketing capacity should be conducted. It is important that this effort involve full collaboration between all regional organizations with a role in tourism marketing and development in order to ensure effective utilization and full coordination of all tourism resources. The effort would likely require raising funds to hire a tourism consultant. Issues that could be addressed in the strategy update include the following:

- Identification of the region’s most competitive tourism niches and development of strategies to enhance and create synergies among niches, including:
 - conventions and meetings;
 - four-season weekend getaway market (targeted to Connecticut, Rhode Island, and New York City);
 - cultural heritage tourism;
 - arts-related tourism;
 - cruise ships;
 - outdoor/recreational tourism (golf, river sports, recreational boating);
 - vineyard tours;
 - off-season activities.
- It is particularly important to promote more crossover between the casinos and other tourism activities. One opportunity is through the development of joint convention packages.
- Development of additional marketing tools, including marketing packages targeted to different market segments.
- Identification and prioritization of potential projects of regional significance, e.g., Utopia, a third casino, golf resorts, parks, historical sites.

2. Promote agricultural tourism.

Agricultural tourism, or agri-tourism, is one tourism niche that has received limited attention in the region. Promoting agricultural tourism can highlight the rural character and agricultural heritage of the region, reinforcing policies to enhance the region’s appeal as a weekend getaway destination, while helping to maintain agricultural enterprises that contribute to

the region’s quality of life by providing an additional source of income to farmers. Agricultural tourism includes such disparate activities as pick-your-own orchards, farm stands, farm tours, corn mazes, dude ranches, on-farm bed and breakfasts, and winery tours.

From a regulatory approach, agri-tourism typically involves multiple uses on a single site, which are not typically addressed in the zoning districts governing the use of agricultural land. An expanded agri-tourism sector will require local municipalities to reexamine their zoning ordinances in light of the potential for agri-tourism in their particular community.

Regulatory Measures to Promote Agri-tourism

Model ordinances have been adopted by several communities nationwide. The ordinance in Howard County, Maryland, permits value-added processing of agricultural products, agritourism enterprises, and pick-your-own marketing of farm products as accessory uses. Montgomery County, Virginia, permits farm enterprises subordinate to the primary farming operations, and also allows valued-added enterprises as special permit uses, including bed and breakfasts, campgrounds, boarding camps, country inns, game preserves, garden centers, general stores or specialty shops, and rural resorts.

Beyond making sure that agri-tourism activities are permitted under local ordinances, more can be done to promote agri-tourism to both farmers and tourists. This would include outreach to farmers regarding their options for adding agri-tourism uses to their operations and coordinated marketing of these attractions by the regional tourism entities.

3. Develop one or more new events that promote regional “community building” and/or attraction of non-local visitors.

“Signature” regional events can help to promote regional identity, to provide unique entertainment for residents, and to draw additional visitors to the region. The region has already had some success in this regard with events such as OpSail, Boats, Books and Brushes, and several annual music and art festivals. In concert with completion of the strategy update, tourism industry representatives should engage others in the region in an effort to develop one or more additional signature regional events that showcase the region’s tourism assets and complement the broader regional image strategy discussed in Strategy 3 of Goal One. This might involve holding a regional competition to develop new event concepts.

WaterFire Providence

WaterFire Providence is a highly successful series of summer events that highlight the city's cultural assets and draw several hundred thousand participants annually. It began as an art installation, First Fire, by sculptor Barnaby Evans, commissioned to celebrate the tenth anniversary of First Night Providence. In 1996, Evans created Second Fire for the International Sculpture Conference where it became the gathering place for thousands of participants from all over the world. Supporters then convinced Evans to create an ongoing fire installation and establish *WaterFire* as a nonprofit arts organization. Now installed along the three rivers of downtown Providence, *WaterFire Providence* has been cited by the Providence Journal as "the most popular work of art created in the capital city's [365]-year history."

The full *WaterFire* installation consists of 100 braziers installed on three rivers and runs for nearly two-thirds of a mile through downtown Providence. *WaterFire* also presents outdoor dancing at the Sovereign Plaza Ballroom and jazz at the Verizon Jazz Stage and other special events on selected evenings. It is planning to present 14 full lightings of *WaterFire* for the 2004 summer season, as well as several partial installations where from 12 to 60 of the 100 bonfires are lit.

4. Establish cooperative initiatives with adjacent regions.

Another possible approach to leveraging the region's existing tourism assets is to work more closely with tourism organizations in adjacent regions. Developing joint marketing and tour packages with adjoining regions could increase the diversity of the tourism experience and encourage visitors to extend their stays in the larger southern New England/Long Island region, to the mutual benefit of southeastern Connecticut and adjacent regions. Opportunities for inter-regional collaboration include the following.

- **Long Island:** Many tourists already cross between eastern Long Island and New London via ferry. Joint promotional efforts could increase the number of visitors spending time on both sides of the Sound. Vineyard visits are one potential attraction that could be jointly marketed. One approach might be to sponsor joint wine tastings on the ferries.
- **Urban Conventions:** Strengthen relationships with convention bureaus in nearby urban areas (e.g., Hartford, New Haven, Providence) to include excursions to attractions and events in southeastern Connecticut in convention packages.
- **Southern Rhode Island:** There are a number of opportunities for synergistic tourism relationships between southeastern Connecticut and southern Rhode Island. Visitors heading to Block Island will be able to take the new fast ferry from New London and could be encouraged to spend a few days visiting southeastern Connecticut on their way to and from the Island. The Pawcatuck Borderlands, which spans the Connecticut-Rhode Island border, is the largest unfragmented forest between Boston and Washington, DC, and a unique attraction for hikers and campers. And, Mystic and Newport have a common appeal to visitors with a strong interest in the nation's early maritime history.

5. Capitalize a regional tourism development fund.

A regional tourism development fund could be established to provide seed funding for feasibility studies, planning, and early-stage development of new tourism attractions that would complement the existing tourism base and support the regional tourism development and

marketing plan. Funds could be targeted to small, local entrepreneurs with promising ideas for new tourism-related facilities, support services, and cultural and entertainment events. Loans would be in the \$1,000 to \$25,000 range. The applicant would have to match the loan funding with personal funds on a 1:1 basis. The fund could be capitalized with contributions from tourism organizations, major tourism businesses, local or state governments (e.g., CDBG funds) and philanthropic organizations (the latter targeted to loans to nonprofit organizations).

Strategy 6: Support Economic Opportunities in Agriculture to Create Jobs and to Preserve the Region's Natural Landscape

The State of Connecticut has recognized that while it is not a large component of the state's economy, the agricultural industry is an important element. There have been a number of recent efforts in the state that highlighted the growing interest in the state's agricultural activities:

- First, in May 2002, the Connecticut Department of Economic and Community Development designated agriculture as one of the target industry clusters for the state and helped to establish the Agricultural Business Cluster. This group, working with representatives of the USDA, the University of Connecticut, and the state legislature, formed a task force to identify funding opportunities in the 2002 US Farm Bill; won a USDA grant to support the state's dairy farmers; and sponsored a study of the potential electric energy from agricultural biomass waste management.
- The Connecticut Food Policy Council, created by the Legislature in 1997 to address issues related to food production, food distribution, and consumer concerns in Connecticut, completed a study, *New Directions for Agricultural Policy in Connecticut*, and hosted a conference on the Next Agricultural Economy in Connecticut in early 2004. This study identified all the relevant resources and policies in Connecticut and identified three directions for policy: increasing the economic viability of farming; fostering development and promotion of markets; and addressing farmland preservation and sustainable land use.
- In April 2004, over \$2 million was allocated from the Bond Commission for the purpose of Farmland Preservation in Connecticut. These funds are to be used to preserve seven farms in Connecticut including three farms in Franklin and one in Voluntown.

The policies that will be critical to support the agricultural cluster in SECT can best be accomplished through these statewide efforts. The issue in SECT is to help organize and promote the efforts of these state groups through engaging more stakeholders in the process and educating local residents and political leaders about the importance of agriculture to the region. To support statewide and regional efforts to strengthen the region's agricultural sector, the following action steps are recommended:

1. Form a regional subgroup within the state's agricultural industry cluster initiative to work on issues to support the retention and strengthening of the regional agricultural base.

seCTer, working with the state Agricultural Business cluster organization, can facilitate statewide policy efforts to support agriculture by convening a meeting of key leaders and

businesses involved in agriculture in the region. It could start this effort by contacting a handful of key leaders in the region such as the owners of Franklin Farms or the local wineries. These individuals could then reach out to others in the industry.

The purpose of the convening would be to form a SECT subgroup within the larger statewide cluster organization that could work on issues specific to the region such as:

- improving public awareness and perception of region's agricultural industries;
- promoting agricultural preservation as a quality of life issue;
- advocating for supportive state and local public policies;
- providing networking and partnership opportunities;
- identifying and supporting value-added agricultural and horticultural products, i.e., cheese making, in addition to dairy farming, wholesale nurseries, biomass development, etc.

Strategy 7: Expand the Labor Pool for Regional Employers by Retaining More Older Workers in the Workforce

The SECT region's population is aging in line with national trends. This has important implications for the regional labor market. The retirement of the baby boom generation, beginning in 2010, coupled with a much lower birth rate during the period 1966 to 1985, is expected to create severe labor shortages, with estimates of five to seven million workers by 2010 and up to 14 million by 2020. Already, older Americans account for 22 percent of the nation's job growth, while comprising only 10 percent of the workforce. By 2015, the number of employees over 55 will reach a record 31.9 million, about 20 percent of the U.S. workforce, compared to 18.4 million, or about 13 percent of the workforce, in 2000.⁷ Not only is the U.S. population aging, but also seniors are living longer and working later in life.

In southeastern Connecticut, these population trends are further complicated by extremely low unemployment rates associated with high job growth. From 1996 through 2002, regional employers were required to adopt new hiring strategies aimed at older workers and non-traditional sources of worker supply to overcome a labor shortfall in the region. These revised and more flexible human resources practices (e.g., benefit packages, worker schedules, etc.) must be sustained. Senior business journalist Paul Kahila puts it this way: "It's stunning how many corporations and chief executives have no idea what's coming....Within a couple of years or so they will be fighting for many of these workers and have to pay a premium for them."⁸

The SECT region is not yet fully prepared to address this challenge. The Connecticut Works Centers in New London and Norwich do not offer targeted services to seniors, and the region currently has only a few small-scale programs to assist older workers.

- The Thames Valley Council for Community Action in Norwich operates the Senior Community Service Employment Program (SCSEP), a national program funded by the U.S.

⁷ Statistics cited are from Knettel, Robert, *Productive Aging in the 21st Century*, www.go60.com, and Brock, Fred, *Who'll Sit at the Boomers' Desks?* *New York Times*, October 12, 2003.

⁸ Brock, *ibid.*

Department of Labor and managed statewide by the Elderly Services Division of the Connecticut Department of Social Services. SCSEP offers employment and training opportunities to interested older persons wishing to remain in the workforce. The program attempts to match the older worker's interests and abilities with a position in a community service agency. Ultimately, SCSEP's goal is to assist the older worker with the transition into unsubsidized employment through training and job search assistance. To qualify, the individual must be 55 years of age or over and have an income not exceeding 125 percent of the poverty level. The program has limited funding — less than 50 training slots were available in New London County in FY 2002-3.

- The Easter Seals facility at the Norwich Business Park, as part of its day programs for adults and senior adults with disabilities, offers an employment orientation program through which participants can explore work/business opportunities in the community as well as a statewide SCSEP Program.
- The American Association of Retired People (AARP) has formed a National Hiring Partnership with Home Depot that is targeted to participants in its SCSEP program, but is also available to other interested seniors. AARP has local chapters in New London, Mystic, Norwich, and Old Lyme, located in local senior centers.
- TVCCA also operates the local Foster Grandparent Program. Foster Grandparents work up to 20 hours per week one-on-one or in small groups with special needs children and young adults in schools, day care centers, Head Start centers, shelters, and group homes.

In addition to the above programs oriented to paid employment, there are other programs that provide seniors with volunteer opportunities.

- The Retired & Senior Volunteer Program (RSVP) provides opportunities to persons 55 years of age and older to participate in their communities by sharing their knowledge and skills through volunteer experiences. The program links retired age people with community organizations seeking assistance. Volunteers provide services in daycare centers, nursing homes, hospice programs, hospitals, home health agencies, and schools with mentoring and tutoring programs (among other opportunities) as well as being community organizers for special projects. TVCCA administers the program for southern New London County while United Community Services administers the program in the northern part of the county.
- AARP connects members to volunteer opportunities with nonprofit organizations through its local chapters and its on-line Volunteer Match service. The site features AARP volunteer opportunities, along with a wide variety of other community-based opportunities of interest to its members.
- Easter Seals offers a volunteer program that provides opportunities for participants to utilize their vocational skills and learn new opportunities through volunteer experiences.
- The Service Corps of Retired Executives (SCORE), sponsored by the U.S. Small Business Administration, recruits retired executives to provide volunteer advice and technical assistance to entrepreneurs and small businesses. The local SCORE chapter serving the region is located in Old Saybrook.

The region must build on this small inventory of programs and significantly expand workforce development capacity related to older workers if it is to adjust successfully to the aging workforce. This will involve efforts targeted to employers, older workers, education and training organizations, and elder service providers. More employers, particularly small businesses, must be educated about developing non-traditional strategies to recruit and retain older workers, offering more scheduling flexibility (e.g., telecommuting, job sharing, part-time and seasonal positions) and benefits options (e.g., phased retirement), providing opportunities for older workers to update their skills, and combating negative stereotypes in the workplace.

Older job seekers must update their job search skills, recognize the increasing importance of computer-based job searches (there are already several websites tailored to seniors), and develop new workplace skills (e.g., computer skills). Traditionally, this group's resistance to engage in education and training has proven to be the workforce development community's biggest challenge. Overcoming this challenge will require properly trained CTWORKS counselors who are well versed in older worker issues. Additionally, education and training institutions must develop programs tailored to older workers and information about resources and best practices must be made more readily available to all parties.

As a first step, Eastern Connecticut WIB should convene a working group of key stakeholders, including regional chambers, major employers, TVCCA and other elder service providers, local Connecticut Works offices, and education and training providers, to develop immediate and longer-term strategies to address this issue. A potential source of technical assistance for this effort is the National Older Worker Employment Partnership, a unit of the National Council on Aging, which provides technical assistance, information exchange, training, and a forum for discussion of older worker issues.

Senior Employment Resources: A Model Employment Service for Older Workers

Senior Employment Resources (SER) is a private, nonprofit organization in Annandale, Virginia, founded in 1983. Since its creation, it has matched jobs in many companies in Northern Virginia with more than 8,000 job seekers 50 years of age and over. SER provides the following services to job seekers for a nominal fee:

- job "bank": or listing of available jobs posted daily by companies that contact SER;
- resume consultation and/or preparation by retired professionals;
- computer training, both at SER offices or in an applicant's home;
- the SER Job Club, a biweekly meeting of seniors who are looking for jobs. The meeting consists of a formal one-hour program on a topic important to developing job-seeking skills, followed by an hour of informal discussions covering individual problems and opportunities.

SER job developers screen and refer appropriately skilled job seekers to client employers. When an employer submits a job order to SER, candidates' skills are matched against that particular opening. A resume of any prospective hire is faxed to the employer, and the employer takes charge of the hiring process from that point. Jobs are also posted immediately on SER's website for registered candidates to review.

GOAL THREE: Build the infrastructure needed to support the region's economic transformation.

For decades, the bulk of Southeast Connecticut's economic activity was confined to a few discrete geographic locations — the Submarine Base, the Electric Boat complex, Mystic Seaport: the Museum of America and The Sea, Downtown Mystic Village, and the Pfizer research and manufacturing facility in Groton City. Over the past 15 years, however, there has been a significant change in the economic geography of the region. The two casinos, now the region's largest employers, are located on sites chosen not for their inherent attributes, but because of the location of tribal lands. As a result, one of these casinos, which attracts tens of thousands on a busy day, is located on a two-lane rural road far removed from the region's highways. A shift to retail and services has resulted in significant commercial growth in Waterford, with its central location in the region's highway network. Finally, a shift away from maritime industries means that highway access has supplanted water access as the most important factor for industrial site location decisions.

The region's infrastructure has not yet caught up to these changes. Otherwise appropriate business and industrial sites along the I-95 corridor lack the requisite roadway access or sewer service. Because the casinos under-contribute to municipal revenues when compared with costs, the towns have resisted, in some cases, the expansion of roadway capacity to these destinations. The highway network is incomplete and lacks redundancy, especially at major river crossings. Finally, traffic congestion on I-95 and around the casinos is having a real impact on the economic competitiveness of the region and its ability to accommodate further growth.

Yet, the region still has significant infrastructure assets. In terms of transportation, an impressive array of intermodal transportation options are centered in New London — ferry, passenger rail, part-time commuter rail, regional and local bus service, and convenient access to I-95. Strengthening and leveraging these assets should remain a focus of transportation planning. The Amtrak station, with Acela service, can assume the role that an airport does in other regions, providing business travelers with a link to and from the east coast's major centers of corporate headquarters and finance — New York and Boston.⁹ Further, I-95, while congested, remains the most important interstate corridor on the eastern seaboard. Finally, the region has a significant amount of available land that could be made ready for development through relatively modest investments in infrastructure.

While some projects can likely be funded and implemented in the short-term, others are years if not decades away and will take a significant commitment of resources from the state and

⁹ New London's location between two major cities is similar to Wilmington, Delaware, midway between New York and Washington, DC. Wilmington's Amtrak station, the nation's ninth busiest, has been referred to by the governor as "Delaware's Airport."

federal governments (such as the widening of I-95). The following strategies and recommendations are designed to leverage and enhance existing assets, while prioritizing future large-scale investments.

Strategy 1: Strengthen the Region's Intermodal Transportation System

The existing intermodal system is one of the region's key assets and distinguishing features. As roadway congestion continues to worsen, not just in the region but also throughout the entire northeast corridor, both leisure and business travelers will increasingly look to other options for getting from place to place. Commuter travel is a tougher issue in the region due to dispersed living and working patterns, but the presence of two concentrated and self-contained destinations — the casinos — provides a possible market for transit use that would not exist in most regions comparable to southeast Connecticut.

1. Concentrate transit efforts on two groups — tourists and casino workers.

Efforts to address traffic congestion generally take one of two forms — expansions of roadway capacity to accommodate more vehicular trips, or transit strategies to shift some of these trips onto other modes. Because congestion in most metro areas is at its worst during peak commuting hours, transit strategies have generally focused on the journey to work.

In southeast Connecticut, however, both residential locations and employment are sufficiently dispersed to render transit commuting impractical for all but a small portion of households, or for those with no choice in the matter. There simply are not enough potential riders to support anything more than the type of regional bus service currently provided by SEAT, even though enhancements to SEAT service remain a priority.

There are, however, two populations for whom transit service could provide a viable alternative: casino workers and tourists. With regards to workers, the casinos employ over 20,000 workers, similar to a downtown with six million square feet of office space. Like an older downtown, these workers are all concentrated in a small geographic area. Moreover, they do not need access to a vehicle while on the job — the casinos provide ample on-site retail and food options — and the casinos already use remote lots and shuttle buses to keep employees from taking up parking spaces that could be used by patrons. Finally, many of the lower wage workers at the casinos, particularly recent immigrants, would find the need to purchase and maintain a vehicle for commuting to be a burdensome expense.

Likewise, casino patrons are another possible target. They are all going to the same place, and they tend not to travel once they have arrived, but to remain on-site. As destinations, the casinos are nearly perfect for transit. Only the wide geographic scope of the origins of casino visitors inhibits wider transit use.

Transit strategies can and should target the non-casino tourist market as well. The SCCOG has identified that such a market can only be effectively tapped with a “Disney-type” service that runs so frequently that convenience is not an issue. The “Disney” analogy should extend further — any transit service targeting tourists should be fun as well as functional, and should be themed, so that the transit ride is an integral part of the visitor experience. As a result,

the transit vehicles may be better utilized if they use the most scenic, as opposed to the most expedient, route between stops, and if they can provide coordinated access to multiple destinations.

The specific recommendations are as follows:

- Partner with the casinos to develop and fund better transit serving areas where casino workers are clustered (particularly recent immigrants and others least likely to own cars).
- Explore the possibility of high-image, “fun” transit connections between the casinos and the intermodal terminal in New London, including use of the rail line, ferries, etc.
- Use seasonal transit service — ferries, special shuttle buses, etc. — both to thematically and physically link the region’s numerous small tourist attractions: Mystic Seaport and Village, New London, Thames Street in Groton, Fort Trumbull, Fort Griswold, the Nautilus Museum, etc.¹⁰

2. Continue to promote New London as the transportation hub of the region.

New London has amazing transportation assets, yet they appear underutilized. Therefore, strategies should be oriented towards coordinating, enhancing, and promoting the existing infrastructure as much as on new modes or projects.

Roadway, rail, ferry, and bus service converge at the New London train station. The station is, therefore, a gateway to the entire region. The station has recently been renovated. Yet, it lacks certain essential traveler services and information. It is, therefore, proposed that New London station should become a primary gateway and source of information for visitors to the region, regardless of their mode of transportation. The following is a list of specific ways of bringing this about:

- *Integrate all modes of transportation — Amtrak, regional/local bus, ferry, and Interstate 95.* Consolidate rail, ferry, and bus ticketing in the main building. Also, provide scheduling information for each mode in the main station. People arriving by rail should be able to easily find out the bus routes and schedules. Ferry schedules should be made available as well.
- *Partner with Amtrak and a rental car company to provide easy and seamless access to rental cars at the train station and ferry terminal.* Many visitors who arrive by transit may wish to continue their travel by car. Amtrak already has a partnership with Hertz at many of its stations. Access to rental cars at the train station should be as easy and seamless as at most airports, or even more so, since rental cars could be stored in the garage directly across the street.
- *Consolidate other traveler information at the train station — regional tourism maps, brochures, event calendars, etc.* The train station is a logical place for one visitor center in the region, which, in turn, would help bring more tourists through New London.
- *Focus on coordination and marketing to enhance existing infrastructure.* For example, SEAT already runs a bus from the station to Foxwoods. Is its availability widely known

¹⁰ SCCOG is presently overseeing the preparation of a \$500,000 transportation strategy board funded study to create a business/marketing plan for this type of system.

in Boston, New York, and Long Island? Is its departure/arrival coordinated with train and ferry arrivals? Is the vehicle used suitable for tourists with luggage?

- *Explore the possibility of expanding Shoreline East service to New London.* The market for commuter rail is small but likely to grow with increasing congestion on I-95. Commuter rail would provide access to Stamford, New Haven, and New York (and vice versa) at more affordable prices than Amtrak.

3. Extend Route 11 to Waterford and the interchange with I-95 and I-395 as the priority roadway (and associated Greenway) project.

The completion of Route 11 has been on the books for years. The COG, the region's MPO, already identifies it as one of four priority projects. This plan essentially endorses the COG's findings and singles this project out as perhaps the most significant transportation investment that could be made supportive of economic development. Put succinctly, a completed Route 11 would increase access to the region for commuters, shoppers, and travelers alike, would cement the link to the Capitol Region, and would greatly enhance the *central place value* of the entire region (especially Waterford).

Like any new highway investment, Route 11 would raise a host of land use and development issues in the communities through which it passes. There is a strong sense locally that the interchanges of Route 11 should not be allowed to develop haphazardly or with the typical mix of retail strips and big box retailers. Fortunately, the COG and impacted municipalities have already taken steps in this regard:

- The preferred alternative for Route 11 in the SCCOG's most recent Regional Transportation Plan calls for a parkway type highway with an adjacent greenway.
- Two towns have begun purchasing land along the right of way to create this greenway along the length of the roadway.
- Waterford is already pursuing a policy of setting aside land for office and light industrial use in the vicinity of the proposed interchange, rather than accepting additional retail, in the realization that the retail market is increasingly saturated, and that more strategic use of the remaining commercial land in the town is warranted.
- Where highway development does occur, strong emphasis should be placed upon design and landscaping, as will be discussed in more detail under Goal Five.

4. Expand roadway capacity to the casinos, especially Foxwoods.

The two casinos are by far and away the largest employers in the region. On a busy day, they draw tens of thousands of patrons. While Mohegan Sun has excellent highway access from its dedicated ramp off of Route 2A, Foxwoods is located off a two-lane rural road, Route 2, never intended to carry the type of traffic volumes that the casino generates. The result has been significant congestion problems, particularly on weekends. The problem will only worsen should Foxwoods expand, as it intends to do and must do if it is to remain competitive.

Yet, there has been disinclination on the part of the affected municipalities to get behind a plan to expand the capacity of Route 2. Because of the lack of a taxing or regulatory authority over the casinos, these municipalities are understandably reluctant to expend resources and

political goodwill to solve a problem that was not of their making, and over which they have no say.

Regardless, the casinos are now, and will continue to be, important forces in the local economy. Their economic health cannot be left to chance, and without the ability to get patrons to and from their attractions, the casinos cannot expand and thrive. Moreover, the traffic problems are having significant local impacts, and cannot be ignored. Clearly, improving roadway access to the casinos is an issue of region-wide significance.

At the same time, the municipalities along Route 2 — North Stonington, Preston, and Ledyard — are right to be worried about the impact of an expanded Route 2 on their community character. For this reason, future roadway improvements should be made mindful of this predominantly rural character.

This CEDS does not recommend a particular set of roadway improvements or bypasses to address casino traffic. It does, however, strongly recommend that the issue not be ignored, and that the affected towns work closely with the COG to develop plans that address the traffic issue in a serious way while minimizing local impacts to community character. It is also suggested that some improvements, such as added turning lanes and signalization, could be undertaken in the short-term to address traffic issues, while more comprehensive strategies are developed.

Strategy 2: Provide Sites and Utilities Needed to Support the Region's Economic Development Priorities

Southeast Connecticut is fortunate to still possess a significant amount of developable land strategically located adjacent to major highway corridors. However, much of this land lacks the appropriate utilities to support development. Typically, such infrastructure would be extended under two conditions: (1) in response to a specific development project; or (2) as part of a government led development effort such as a commercial park. Under the latter case, the cost is immediate (although typically paid off over time), while the benefits are speculative and may take years to realize. Yet, there are several reasons to proactively provide infrastructure to prime development areas:

- Many site location decisions are inherently opportunistic. If no site is available that meets the specifications and time frame of the company in question, it is likely to move elsewhere.
- While large corporations (such as Wal-Mart) generate sufficient profits to justify underwriting the roadway and other improvements necessary to service their developments, most small companies cannot shoulder such burdens and are looking for “turnkey” sites.

Utility provision in SECT is under the jurisdiction of multiple entities, both private and governmental. Sewer service (pipes and treatment plants), for example, is typically provided by municipal utilities. Yet, sites needing service may straddle municipal lines, or even be located in municipalities without a sewage authority. Necessary road improvements may be the jurisdiction of local government or the state. Clearly, a regional approach (as published in the Regional Plan

of Conservation and Development) to prioritizing areas and corridors for investment should be followed both to direct resources where they can provide the most benefit, as well as to coordinate agreements between municipalities.

1. Expand availability of appropriate sites with necessary access and utilities.

Strategic investment in infrastructure can pay dividends over the long haul, both in terms of jobs and tax revenue. From a regional perspective, such investments should be made in the locations best situated to capture future economic growth and activity. Yet, there is no regional source for such investments save transportation improvements. Other investments, be they the extension of a sewer line or the construction of local access roads, are typically funded by state or local tax dollars, although this CEDS can bring federal dollars to the table. From the state's perspective, such investments are funded to enhance Connecticut's overall economic competitiveness; from a local perspective, they are made to enhance the local tax base.

The regional role in expanding infrastructure is threefold. First, the COG, the MPO for the region, in its plans prioritizes roadway and transportation projects. Secondly, the COG and seCTer can lend their voices and support when local governments apply for state funding for infrastructure projects. Finally, the CEDS obviously has a role in establishing and maintaining a prioritized list of infrastructure project eligible for Federal EDA funding.

More specifically:

- Prioritize roadway projects based on development potential. The typical planning process for new roadways concentrates on ameliorating existing traffic problems. However, supporting future development opportunities should also figure into the criteria for prioritizing future roadway investments.
- Use a similar approach for other projects such as sewer line extensions. For example, Ledyard is interested in extending sewer to Route 12, as far north as the Dow plant. Such an extension makes sense if there are sufficient sites with appropriate zoning available to make such a project cost-effective.
- Leverage DECD funds for access and infrastructure improvements. The state is willing to make funds available for projects that enhance the ability of the state to capture businesses activity.
- Educate public and elected officials on benefits of investment through cost-benefit, fiscal impact, and other analytical techniques. Worthwhile projects have stalled due to a lack of support from elected officials. Those in the economic development business — local planners, seCTer, the COG, and others — must ensure that local officials are fully informed as to the benefits of proposed investments.

2. Provide support for the development of the Regional Water Network.

The Regional Water Network program includes a new water pipe under the Thames River, providing the ability to move water from areas of excess supply to excess demand. Currently, Groton has a surplus of water supply, and the short-term motivation for the new pipe has been the need to provide additional water to the Mohegan Sun casino and resort complex.

The Mohegan Tribe provided initial funding for the project, but additional funding will be necessary to fully complete the Thames River Basin Water Interconnection Project.

Strategy 3: Support the Development of New and Affordable Housing Options in the Region

In almost every interview conducted as part of this CEDS, housing was raised as an issue more often than any other save transportation. A regional shortage of housing, particularly affordable housing, is perhaps the most pressing social issue in the region. It is also an economic issue. A lack of affordable housing opportunities constrains the ability of firms to recruit workers, especially entry-level workers. The region is now a net importer of labor. Commute distances and times are increased for workers, increasing costs for individuals as well as employers, and adding to the region's traffic woes. For these and other reasons, the production of housing, particularly housing affordable to working families, is essential to the future health of the region.

Recently compiled data show that housing production has started to accelerate as a result of the pent up demand. Residential building permits issued grew every year from 2000 to 2003, increasing from 433 to 1,067, for a four-year total of nearly 3,000 (U.S. Bureau of the Census, as compiled by Richard Erickson, AICP). Yet, a closer look at the data reveals continued problems. While the shortage is worst for affordable housing — 87 percent of the permits over the time period were for single-family homes — only 14 percent of the permits contributed to new rental housing, far below the need identified in the 2002 report, *Housing a Region in Transition: An Analysis of Housing Needs in Southeastern Connecticut, 2000-2005*. Further, a very large share of these permits was issued in the region's urban communities — one-quarter of the 2003 permits were in Norwich alone. Groton, New London, and Norwich cannot be expected to maintain this pace of production indefinitely.

With regards to multifamily housing (both ownership and rental), the region finds itself in a conundrum. At the present time, there is strong demand for multifamily housing. There are developers ready to build multifamily housing, and suitable sites exist for the production of multifamily housing. Yet, production lags. As identified in the 2002 report, zoning, and secondarily a lack of utilities, constrains the production by the private market of less expensive housing prototypes, including rental apartments and townhomes. The housing shortage is primarily a function of the regulatory environment, rather than structural factors.

The reason is not hard to fathom. Housing, particularly affordable housing, is seen by individual municipalities as a fiscal negative, primarily due to the cost of education. The extent to which this is true is subject to debate — many types of housing are less negative from a fiscal standpoint than is generally believed, and some can even have a positive impact. Yet, the belief is pervasive and informs municipal land use policy. Each town, left to its own devices, has little incentive to accept additional housing development and every reason to avoid doing so. The problem is further exacerbated by the fact that the major employers driving the need for new housing — the two casinos — are not subject to local taxing authority.

Overcoming this seemingly intractable situation will require both a push and a pull. With regards to the pull, the SCCOG has made great progress making the case for a regional housing strategy. Regional revenue sharing and property tax reform, while difficult goals, could help remove disincentives. Further, a strong case can be made for directing a larger amount of casino (slot) revenue back towards the region. Yet, further impetus (push) is needed. The state's affordable housing law provides some incentive, but only for subsidized housing, and the law is currently weak. Incorporating lessons from the New Jersey model may provide a basis for strengthening the state legislation. Whatever solution is eventually proposed, the concept of "fair share" must be paramount. Each town must contribute fairly towards the solution, such that no one town is left with an inequitable share of the burden. The region's housing woes are not a problem for Norwich and New London to solve.

1. Adopt a "fair share" approach to equitably distribute regional housing responsibilities.

This plan recognizes that the disincentive to produce housing is embedded deep within the property tax system, and that additional local revenues — through either local revenue sharing, property tax reform, or an increased local share of casino slot revenues — are needed to offset costs. Such reforms will not be easy to achieve, and may be years or decades away. Even still, the "do nothing" alternative remains an inappropriate response to the regional housing shortage. Yet, it will be difficult to gain forward momentum unless there is a strong perception that the "burden" of housing development, particularly affordable housing, is evenly and fairly shared among the region's constituent municipalities.

Setting targets is a first step in the process. Regionally, the need for affordable housing has been estimated by the SCCOG, first in its initial report, and more recently in a study update. Keeping this number up-to-date is important. But from this regional number must come an agreement for how the region's constituent towns will contribute to achieving the numerical goal. Although the Blue Ribbon Housing Initiative Panel has been formed, it is purely a committee of volunteers; only a body with decision-making representatives from each town can effectively take on this task. A multi-town regional housing collaborative is recommended as a vehicle for this purpose.

Agreement as to goals is important, but agreement as to the appropriate strategies to meet those goals is even more important, as well as more difficult. The next recommendation proposes some example strategies for different types of towns. However, changes in local zoning to permit more multifamily and small-lot construction must be part of the menu of options if any significant amount of housing affordable to low and moderate wage earners is to be produced.

2. Adapt particular housing strategies for each community.

Implicit in the notion of a "fair share" strategy is the further notion that each municipality has a different role to play in producing additional market-rate and affordable housing. These roles should respond to the particular resources, needs, and character of each community. As examples, the following are first takes of what such strategies might look like:

- In Norwich, where substandard structures and neighborhood revitalization are issues, the housing strategy might focus on rehabilitation and infill.

- In New London, a market-rate housing strategy for the downtown might be coupled with a strategy in the surrounding neighborhoods to prevent displacement through the nonprofit acquisition, renovation, and control of existing affordable housing resources.
- Mature suburban communities might implement zoning permitting accessory units subject to controls to address the housing needs of seasonal employees, the elderly, and other populations.
- Suburban locations with utility and bus access might be rezoned to permit additional multifamily development.
- Suburban and rural towns experiencing growth pressure might contribute to a regional housing fund.
- As a further source of funds, modest linkage fees might be imposed on major commercial developments.
- Inclusionary zoning could help promote affordable housing in areas where market values are sufficient to cross-subsidize affordable units through density bonuses (i.e., permitting the developer to exceed normal density restrictions in exchange for providing additional affordable units).

3. Aggressively pursue a revenue sharing strategy to offset costs associated with housing.

Housing is widely perceived by municipalities as a fiscal negative due to school costs. While this is not always true, it is sometimes true, and, therefore, the “burden” of affordable housing will have to be offset with other sources of revenue if it is to be accepted by towns in the region.

The least painful source of funds is the money generated by slot revenues at the casinos. This money is paid directly to the state, and a portion of it is to be returned to the region to offset local costs associated with the casinos. However, a large share of the money is spent elsewhere, mainly in major urban centers. It is widely perceived that the slot revenue returned to the region is insufficient to offset the local fiscal costs of the casinos, a notion that has been supported by studies. Yet, once funds are committed elsewhere, it is politically difficult to reduce those commitments.

It is, therefore, proposed that the amount of slot revenue spent outside of the region be capped, permanently or temporarily, and indexed to inflation. As the casinos expand and slot revenues increase, a larger amount of money could be available to effected towns in the region. Portions of this money could be used for the production of affordable housing, and used to offset local school district costs. Under such a scheme, the local municipalities would no longer have an incentive to impede casino expansion, and the state’s revenue stream would be better protected.

As a second initiative, the fair share strategy discussed above could include the creation of a regional pool of funds for affordable housing production and rehabilitation. Payment would be made into the pool by member towns partially in fulfillment of their fair share obligation. Contribution should also be sought from major employers, including the two tribes.

Lastly, the region should begin to explore the potential for tax base sharing, likely to initially start around major developments of a regional nature, such as the reuse of the Norwich State Hospital. From these pilots, the region can explore other means of more equitability sharing the benefits and costs of new housing production.

4. Encourage the State Legislature to strengthen the state’s affordable housing laws.

The state already has an affordable housing law: every town is required to provide an amount of affordable housing equal to 10 percent of its entire housing stock; and towns that do not meet this requirement can be sued by developers looking to build affordable housing projects.

Yet, the law as it stands has several major flaws. The 10 percent requirement is arbitrary, unrelated to housing need or such issues as the ability to accommodate new housing development. The ability of developers to overturn project denials is constrained.

Perhaps no state has done more to mandate affordable housing production than New Jersey. Following the landmark Mt. Laurel I and II decisions, the state implemented an elaborate program to calculate the “fair share” affordable housing requirement of each town in the state, with an enforcement mechanism that relies upon private developers seeking zoning relief in court. While the program is politically controversial, has led to ill-conceived projects, and is currently under attack, it has several key elements worth emulating:

- A state agency, the Council of Affordable Housing (COAH), issues numerical fair share targets for each municipality in the state. These targets are based on a complicated econometric model developed by Rutgers University.
- Towns are required to complete a housing element as part of their Master Plans (known as Plans of Conservation and Development in Connecticut) outlining how the town plans to meet their fair share requirement. Housing elements are reviewed by COAH. If accepted, the municipality receives “substantive circulation” and is protected from future litigation on affordable housing matters.
- Towns without substantive certification that have not fulfilled their fair share obligation can be taken to court by developers. Upon a finding that the developer has a site suitable for the production of affordable housing, the town can be forced to implement zoning allowing the development of an inclusionary housing development, typically at a density of six or more to the acre. This is known as a “builder’s remedy.”

One of the most frequent complaints about the system in New Jersey is that it has led to bad planning — large townhouse and garden apartment complexes located in former farm fields, far away from established centers. For this reason, Connecticut, when looking to strengthen its affordable housing statutes, should also seek to incorporate detailed planning standards for affordable housing developments created via successful builder’s remedy suits.

5. Secure funding to sufficiently staff regional housing initiatives.

The Blue Ribbon Housing Initiatives Panel has done an excellent job to date in defining the scope of the regional housing problem and proposing specific solutions. However, without the capacity to carry these recommendations forward, they will languish. It is, therefore, recommended that a staff position of regional housing coordinator be created at the COG to (1)

oversee updates to the plan; (2) research and advocate for regional housing initiatives; (3) lobby the state for funds and statutes supportive of housing production; and (4) monitor town-level efforts as they relate to fair share criteria. The Blue Ribbon Panel is currently seeking private funding to establish such a position to be housed at the SCCOG.

GOAL FOUR: Promote career opportunities that can move low-wage workers into careers providing a family wage.

Profound changes in the corporate and industrial workplace have occurred over the last ten years. Fierce domestic and global competition has forced companies to adopt changes in the way they do business. The result is a dramatically different work environment, one that requires “high performance” from employees: teamwork, problem solving, critical thinking, understanding systems, and effective written and oral communication. Employers feel, however, that many employees lack the skills and training needed to perform at higher levels.

The factors that have defined a “competitive” region have undergone fundamental change and will continue to evolve as the full implications of recent technological and demographic changes play out in the economic arena. It is critical that the strategic thinking around economic development in southeastern Connecticut consider the full implications of this transformation on both existing core industries as well as growing new industries. One thing, however, is clear — the one critical defining issue in the region’s economic future will be the quality and depth of its labor force. Jobs will increasingly follow people. This means that the region has to be able to ensure that its existing residents have the skills needed to compete in this new economy and that the region has to be able to attract new talent. There is a major paradigm shift in economic development — from a focus on jobs to a focus on people. Investments in education and workforce development, as well as on quality of life factors, take on prime importance.

Building a skilled human capital base is critical to the region for two reasons. First, many of the residents of the region, particularly the low-income residents concentrated in the urban communities, lack the basic skills needed by regional employers and are unemployed or remain outside of the labor market. Others, while employed, lack the training they need to be able to advance up a career ladder that could provide them and their families with greater earnings. Second, the competitiveness of employers in the region is compromised when they are unable to access the workforce that they need to compete effectively in the global economy.

As the region seeks to address this challenge, it can draw upon a considerable base of existing workforce development resources. These include:

- **The Eastern Connecticut Workforce Investment Board (EWIB).** EWIB administers and oversees the implementation of the Federal Workforce Investment Act (WIA). It also sets policy and program direction for the region’s workforce system, has a specialized focus on the employment and training needs of in-school and out-of-school youth in the region, contracts with a broad range of training providers to deliver education and training services to individuals and companies, runs the region’s CTWorks One-Stop Career Centers in Norwich and New London, supports customized training programs for employers in the healthcare, manufacturing, and pharmaceutical sectors, and has initiated special programs such as a

transportation service for low-income workers, and a new web-based training program for incumbent workers.

- The region's **colleges and universities** also play an important role in workforce and skills development. These include Three Rivers Community College, University of Connecticut – Avery Point, Connecticut College, the United States Coast Guard Academy, Mitchell College, Lyme Academy College of Fine Arts, Rensselaer Polytechnic Institute at Hartford – Groton Campus, and University of New Haven/Southeastern on the Mitchell College Campus.
- A number of **nonprofit and community-based organizations** offer employment and related services, with special attention to individuals with low skills and other barriers to employment. These include Thames Valley Council for Community Action (TVCCA), the lead partner in operating the Norwich and New London CTWorks centers, Opportunities Industrialization Center of New London County (New London), Centro de la Comunidad (New London), and Thames River Community Services (Norwich).
- **Regional vocational-technical schools** in Norwich and Groton are also part of the region's workforce development infrastructure. In addition to an extensive offering of occupational and work experience programs for high school students, these schools provide specialized training and certificate programs for adults who want to enhance their skills within a given occupation or receive training to make a career change. These programs include automotive mechanics and body repair, culinary arts, machine drafting, manufacturing technology, building trades, electronics, healthcare, graphic communications, and hospitality.
- **Proprietary training organizations** add to the region's workforce development resources. These include Educational Training of Wethersfield (New London site), Teamwork, LLC (Salem), Ridley Lowell Business and Technical Institute (New London), Sawyer School (New London), Hellier Northeast (Niantic), and Manpower, Inc. (Norwich). These organizations offer training in a range of occupations, particularly medical, office, and information technology.

The region must leverage and build on these resources to meet its human capital development challenges. The region is already sharpening its focus on skill building for the existing and emerging workforce. ECWIB's three core strategies for 2004 are:

1. Increase training investment in low-wage incumbent workers to maintain the necessary inventory of highly-skilled workers needed to fuel future economic growth.
2. Upgrade the region's CTWorks Centers to ensure access to high-quality training and career resources for all residents of the region.
3. Increase regional partnerships between the workforce system, key industry groups, and youth development providers for the coordinated preparation of tomorrow's workforce.

One of EWIB's top priorities is providing a continuum of learning, or "career ladder," for low-wage earners to acquire new skills and increase their value in the labor market. Its workplan for 2004 includes identifying one or two industries to partner with on career ladder initiatives.

EWIB's recent report, *Plotting a Course to the Future: Workforce Watch 2004*, explains the rationale for this focus:

Our region's workforce policy must raise the level of training for incumbent workers so that they can take the place of highly skilled retiring workers of the previous generation. Moreover, we must establish and promote clear career pathway opportunities for workers to become upwardly mobile, including access to community college education and other skill upgrades. Without career pathways, the region faces two distinct but equally dire realities: (1) an insufficient supply of workers prepared to fuel economic growth, and (2) an ever-increasing preponderance of low-wage earners without the skills necessary to obtain the wages they need to support their families.

The following set of strategies focuses on developing career ladders and other skill-building initiatives that better match the skills of residents with the workforce needs of the region's employers.

Strategy 1: Further Enhance the Positive Relationship Between the Workforce Development System and Economic Development

Economic development today requires greater attention to integrating the demand side — sustaining a strong economic base — and the supply side — ensuring that the region has the human capital required by regional employers. As a result, it is critical that key actors in southeastern Connecticut's workforce development system work closely with economic development organizations to integrate workforce development into broader economic development efforts. Workforce and economic development organizations in the region already enjoy a close working relationship, as exemplified by the involvement of leading workforce development organizations, including Three Rivers Community College and EWIB, in the CEDS planning process. These positive relationships can be built upon through initiatives like the following:

1. Integrate regional and local strategic planning for economic and workforce development.

Mechanisms should be put in place to ensure that all regional strategic planning related to workforce and economic development is closely aligned through the joint involvement of both communities, the exchange of relevant information, and the development of consensus on approach and priorities. In addition to joint participation in strategic planning efforts like the CEDS process and preparation of the EWIB's regional workforce development plan, leading economic development and workforce development organizations should hold joint meetings on a quarterly or semi-annual basis to monitor collaborative efforts, identify emerging issues, discuss ways to more effectively integrate activities, and develop performance measures and accountability mechanisms for integrated workforce and economic development initiatives.

2. Further engage regional chambers of commerce in the region's workforce development activities.

Regional chambers of commerce throughout the U.S. have become heavily involved in workforce development in recent years. This has involved participation in training programs,

establishment of foundations to fund education and training efforts, and even operation of One-Stop Career Centers. The U.S. Chamber of Commerce's Center for Workforce Preparation has played a strong role in promoting chamber involvement in workforce development. Chambers can play a valuable role as intermediaries between workforce development service providers and its members, particularly smaller employers without internal human resource capacity. Southeastern Connecticut's regional chambers should enter into discussions with EWIB, the region's CTWorks One-Stop Center operator and other workforce development service providers to identify how the chambers can further support and enhance the provision of workforce development services to member employers. The chambers might play the following roles in collaboration with workforce development organizations:

- develop more accessible, comprehensive, and integrated information sources on workforce and economic development (e.g., through joint websites);
- joint efforts to generate and provide more accurate, up-to-date labor market information through increased access to regional employers;
- aggregate demand for workforce development services among small firms through multi-firm training consortia. The chambers could identify groups of employers that have common training needs and then help these employers to jointly contract for training services. These could be ad hoc groups for a single training or longer-term programs involving multiple training engagements;
- support the development of training programs that address cross-cutting industry needs, e.g., customer service, information technology;
- participate in efforts to strengthen the workforce training capacity of the region's higher education institutions.

3. Involve workforce development organizations in business expansion, retention, and recruitment efforts.

This CEDS contains other recommendations for strengthening regional business expansion, retention, and recruitment efforts. Economic development organizations that take the lead role in these activities should ensure that workforce development is included among the resources and services made available to targeted businesses. EWIB should be engaged to determine how best to integrate these activities. One example would be to have TVCCA, the one-stop operator, participate in a regional business calling program to identify the workforce development needs of local firms. Another would be to work to more closely integrate workforce and business development services for regional industry clusters.

Strategy 2: Establish a Regional Newcomer Initiative

Ethnic minorities and immigrants are becoming an increasingly important part of the SECT population and workforce. Immigrants accounted for all of the population growth in New London County during the decade of the 1990s. In fact, the county actually experienced a net loss of native-born population during this period. As a result, the region's population is becoming more ethnically diverse. In 2000, 13 percent of the region's population was non-white. Of the non-white population, about 40 percent was black, 15 percent Asian, 7 percent American

Indian, 14 percent another single race, and 21 percent more than one race. About 5 percent of the region's population was Hispanic, a 57 percent increase over 1990. Anecdotal evidence indicates that the proportion of recent immigrants and ethnic minorities has continued to grow since 2000.

The continuing strength of the region's labor market and the growing importance of recent immigrants in the labor market make it imperative that the skills of these newcomers be utilized to their fullest. These individuals face unique barriers to full integration into the labor market and the larger community. This may include limited English language skills, unfamiliarity with U.S. laws and social norms, and difficulty obtaining professional credentials for skills developed in their native countries. Some of these individuals may also lack the basic skills needed to obtain even entry-level jobs. At the same time, isolation from the larger community can deprive the community of the hard work habits, entrepreneurial drive, and cultural heritage that they are able to contribute to the region's economic and cultural life.

A ***Regional Newcomer Initiative*** should be established to address this issue. The initiative should be spearheaded by a regional organization with strong ties to the newcomer community and the organizations that serve it. The most likely candidate is the United Way of Southeastern Connecticut. The initiative should also have the support and participation of leading economic development and employer organizations, local education, job training and social service providers, local governments with significant newcomer populations, and community-based and faith-based organizations.

As a first step, the United Way should establish a task force responsible for planning and implementing the initiative. The task force should include representation from the stakeholders described above and should also include representation from the major ethnic groups within the newcomer community. Research for the initiative should include surveys and/or focus groups with a sample of the newcomer community to better understand their needs, aspirations, skills, and barriers to employment and social integration. Employers should also be interviewed to better understand issues relating to employment of newcomers from their perspective. Agencies that serve newcomer groups should also be interviewed.

While the actual design of the initiative will be determined by the needs analysis, it is likely that it will include some or all of the following components:

- Increased access to ***English language education and adult basic education*** — targeted to individuals who have limited English language skills and lack a high school diploma. These services should be offered at times and locations that enable students to participate while continuing to work.
- ***Acculturation education*** — assistance understanding relevant laws and regulations, eligibility for and access to social and human services, and American customs and culture.
- ***Occupational skills training with contextualized ESOL*** — training newcomers for entry-level positions (e.g., home health aide, housecleaning) integrating ESOL in order to provide both workplace skills and accelerate acquisition of English language skills.

- ***Professional credentialing*** — assistance for individuals who have professional training in their home countries but need help getting additional education and/or preparation for credentialing exams.
- ***Entrepreneurship assistance*** — technical assistance to individuals with entrepreneurial experience or aspirations to start or expand small businesses. This should tie into general regional entrepreneurship efforts described in Goal Two, Strategy 1.
- ***Diversity education for employers*** — education for employers on adjusting human resource practices to promote successful integration of newcomers into their workforce and provision of information to help employers refer these employees to appropriate education, training, and social services.
- ***Promotion of ethnic arts and culture activities*** — integration of cultural organizations and activities among the region's various ethnic communities into larger cultural initiatives. This might include developing marketing and funding strategies for ethnic cultural events and performances, supporting the development of appropriate performance and exhibition facilities, promoting restaurants, and linking ethnic cultural activities with the region's mainstream cultural institutions. This effort should tie into broader efforts to support the region's creative cluster, described in Goal Two, Strategy 4.

The Pittsburgh Hispanic Center

Economic development organizations in the southwestern Pennsylvania region have developed a multi-faceted talent attraction and retention strategy in an effort to augment the regional workforce. As part of this effort, the Hispanic Center was established in 2001. The Center is a nonprofit corporation with the mission of assisting families who want to relocate to southwestern Pennsylvania. The Center's work is primarily focused on the Hispanic population, although it also helps families of other origins. The Center's activities include providing job opportunities through recruitment, placement, and retention efforts. It also facilitates the purchase of affordable homes and access to training, other educational programs, and services that address the needs of families seeking to settle in the region.

Strategy 3: Develop a Tourism Career Ladder Initiative

Tourism employment is commonly perceived as low-wage, often seasonal, and with very limited advancement opportunities. While there is some truth to this perception, the growth, diversification, and increasing sophistication of SECT's tourism industry have greatly expanded opportunities for career advancement in the industry. The opening of the two casinos was a decisive factor in this transformation. With employment of over 20,000, year-round operations, and a mix of gaming, convention, retail, restaurant, and entertainment activities, as well as corporate operations, the casinos have brought a significant number of higher-skill gaming, food preparation, mechanical, marketing, IT, security finance, human resources, and management positions to the region, adding to the higher-skill positions already offered by the region's traditional tourism industry.

The rapid growth and changing structure of regional tourism employment merits closer examination of how the region's workers can be assisted to take full advantage of higher-skill tourism jobs. These jobs need to be filled, and if the need cannot be met with the local workforce, workers with the requisite skills will be recruited from outside the region. It is particularly important to examine how workers already employed in entry-level tourism jobs can be helped to move up the career ladder.

1. Organize a collaborative effort involving key actors.

A Hospitality Career Development Collaborative should be established with representation from industry organizations, individual employers, and training providers. The Collaborative would have responsibility for working with individual employers and with groups of employers within the industry. The program should have the following elements:

- ***Research on career ladder opportunities within the cluster.*** This involves quantifying and characterizing the skills requirements for jobs that are above entry-level, quantifying the demand for workers in those jobs, identifying the barriers that people in entry-level jobs face in gaining access to career ladder jobs, and articulating the training and support systems needed to move people from entry-level jobs into jobs that have career advancement opportunities. These opportunities may include gaming (e.g., dealers), skilled culinary, equipment maintenance/repair, supervisory, and mid-level management positions among others.
- ***The right blend of skill development tools.*** Supporting advancement will require mastering technical skills. Other learning requirements may include ESOL, basic math and computer skills, and soft skills such as communication, problem solving, and teamwork. It may also involve a combination of on-the-job training and formal classroom training either on-site or at an educational institution. These programs should be developed through collaboration of employers and learning providers.
- ***Career development managers.*** Career development managers should work with people who are moving up the career ladder, provide assistance in choosing the right training and

skills upgrading programs, and be available for solving problems as they arise. Developing a long-term, individual plan for each worker would also be important.

- **Peer support systems.** For those who are moving up the ladder, the path can be difficult and anxiety producing. People who are used to being in entry-level jobs will find a higher-level work environment threatening. Therefore, developing a peer support system within an employer is very helpful.
- **Targeted training for supervisors.** This is a strategically important link in a career ladder program. If supervisors are supportive of the effort, it is likely to succeed. If they are not, then even the best of intentions from CEOs to HR directors can fail. Consequently, training for supervisors that helps them be more effective in their work and gives them opportunities for their own advancement is key.

A suggested starting point would be a small working group with joint industry and workforce development leadership such as EWIB, Connecticut EAST (Tourism District), and Mystic Coast and Country Travel & Industry Association, with participation by a cross-section of tourism employers with a strong interest in the initiative, and key training providers. On the employer side, it would be useful to have the involvement of companies that may have already initiated a career ladder or pathways program.

2. Expand the hospitality management degree program at Three Rivers Community College.

Career advancement in the tourism industry requires access to post-secondary education. Higher education institutions already have some capacity in this regard. Most notably, Three Rivers Community College has certificate and associate degree programs in hospitality management, each with casino, hotel, and restaurant options. But with the explosive expansion and diversification of the industry, existing higher education capacity may not be adequate. One potential role of the Hospitality Career Development Collaborative would be to examine existing higher education capacity in the region and recommend the refinement of existing program and/or the development of new programs, as appropriate.

Strategy 4: Develop a Healthcare/Biomedical Training Initiative

The region's healthcare industry is both a major employer and an important contributor to the region's quality of life. The availability of an adequate supply of appropriately skilled workers is critical to the health of this industry. The region has a wide range of organizations and programs that provide training in healthcare occupations. Nonetheless, regional healthcare institutions are suffering from serious shortages in nursing and in other technical areas like radiological technicians and pharmacists. One important contributing factor is gaps in training capacity. For example, Three Rivers Community College's RN program does not have enough slots to meet student demand, and there are no programs within the region providing training in some high-demand occupations, notably radiological technicians.

1. Develop an industry cluster approach to healthcare training.

A highly organized industry cluster approach may be the most appropriate response to the significant workforce needs of this industry. A comprehensive regional initiative would be designed to build on existing activities, increase their scope and scale, utilize existing resources more effectively and efficiently, tap additional resources, and more fully engage employers. Based on initiatives in other regions and the needs and issues already identified in SECT, a regional initiative might include the following components:

- ***Improve recruitment of healthcare workers:*** Undertake regional outreach and recruitment activities; target non-traditional workers (gender, race, ethnicity, age); conduct career awareness and development activities for K-12 students; develop skills assessment tools; develop and disseminate occupational demand information; expand contextual adult basic education, occupational training, and work readiness programs; provide support services.
- ***Increase educational capacity:*** Expand and improve facilities, (classrooms, distance learning, clinical sites); address faculty shortages; develop partnerships among learning providers and between providers and employers; expand and simplify articulation agreements; develop new funding mechanisms.
- ***Facilitate career development efforts:*** Make training more accessible and flexible; structure educational programs to support mobility and career pathways; provide support services.
- ***Enhance retention and work environment:*** Increase employer-supported professional development opportunities; improve work environment; restructure internal human resource policies and practices to build career ladders.
- ***Advocate for more supportive public policies:*** Improvements in labor market data; increased support for school-to-career initiatives; reforms in state higher education policies; increased flexibility in state training programs.

The initiative should build on recent and ongoing regional efforts, including the development of a career advancement training program for CNAs by Three Rivers Community College in collaboration with Backus Hospital, the funding of a nursing faculty position at Three Rivers by Lawrence & Memorial Hospital, and a number of articulation agreements developed by local higher education institutions with other institutions both within and outside of the region. These include Three Rivers' Dental Hygiene Transfer Compact with University of New Haven and its Nursing Transfer Compact with UConn.

The Northeast Ohio Health Care Employment Network

The Network is a comprehensive employer-led initiative recently established to address healthcare industry workforce needs in a three-county region of northeast Ohio. The initial impetus for the initiative came from the Mahoning and Columbiana Training Association, the workforce investment board serving two of the three counties. Recognizing the importance of the healthcare industry to the region and critical staffing shortages in nursing and other health occupations, the WIB director took the lead in organizing a Regional Healthcare Workforce Summit. With funding and in-kind support from major employers, higher education institutions, economic development organizations, and local governments, a steering committee was established with over 40 representatives of industry, workforce investment boards, career centers, economic development organizations, local government agencies, higher education institutions, other training providers, organized labor, and community-based organizations.

In preparation for the summit, a study of healthcare industry employment and related workforce development resources was completed. The study helped to identify critical issues to be addressed at the summit. The summit, held in October 2002, was attended by about 250 participants, including employers, educational institutions, other workforce service providers, and government. About one-third were employers. The summit agenda included presentations by regional industry leaders and healthcare workforce experts, and a set of breakout session at which participants discussed a range of critical industry workforce issues.

Based on issues identified in the research and at the summit, the summit organizers completed a Workforce Development Action Plan in early 2003. The plan is composed of four major strategic initiatives, each with a set of goals, objectives, and action steps. The four strategic initiatives are: 1) enhancing image and communication to increase recruitment of new workers; 2) addressing skill development and career advancement; 3) supporting worker retention; and 4) strengthening collaboration among key stakeholders.

The Network was officially established to implement the Action Plan. The Network is governed by a 15-member Employee Advisory Council and staffed by a paid coordinator. During the first half of 2003, it formed action teams to work on two of the strategic initiatives, career pathways and collaboration. It recently piloted a program involving career development in medical office occupations.

EWIB could start this process by initiating discussions with the healthcare employers and training providers about the need for and potential shape of this type of initiative. If sufficient interest were expressed, it could establish a working group to oversee the implementation process.

2. Develop a regional healthcare and biomedical career education and exploration program aimed at the region's high schools.

Leading employers in the healthcare and biomedical industries should take the lead in this initiative, working with local school districts. The initiative should include the development of informational tools (an informational website, CDs, videos, publications, speakers' programs), job shadowing, internships, and scholarship programs. It can build on more limited programs aimed at some local schools by Pfizer, Backus Hospital, and Lawrence & Memorial Hospital. It could also be integrated into a more broadly focused career literacy program described in Strategy 7 below.

Strategy 5: Maintain and Augment the Capacity to Produce a Highly-skilled Manufacturing Workforce

While manufacturing employment has declined in SECT in recent years, as in many parts of the U.S., it remains an important source of high-paying jobs. Many of the region's remaining manufacturers are technology-driven firms that require a highly-skilled workforce. Electric Boat is the most prominent example. Pfizer is another, although manufacturing is a small component of its overall employment (about 500 out of a total workforce of roughly 6,000). There are also other manufacturers needing skilled employees in the paper, machinery, primary and fabricated metals, electronics, plastics, and printing industries.

The demand for skilled manufacturing workers may grow as the bubble of skilled manufacturing workers from the baby boomer generation begin to retire. Electric Boat, for example, expects a large number of its current manufacturing workforce to reach retirement age during the next 10 to 15 years. Retaining and attracting manufacturing firms in the region will require increased attention to supplying the highly-skilled workers advanced manufacturing firms need to succeed.

The region already has significant training capacity in the manufacturing sector. Electric Boat reports that it has the largest apprenticeship program in the state — a partnership of the state, EWIB, Three Rivers Community College, and the region's vo-tech schools. Three Rivers offers EB workers an associate's degree in general engineering technology linked to their apprenticeships, which provides credit for work experience.

1. Develop a longer-term strategy to replace retiring highly-skilled workers at EB and other advanced manufacturing firms in the region.

The region should build on these assets to ensure that it is prepared to replace its retiring manufacturing workers with highly-skilled younger workers and, more generally, to keep up with the technological advances and corresponding workforce training needs of the manufacturing sector. EWIB should lead this effort, with seCTer and the regional chambers providing outreach and liaison with employers. This effort should include:

- outreach to manufacturing employers to identify and quantify workforce needs and training requirements, as part of the calling program described in Goal Two, Strategy 6.
- development of a program to promote skilled manufacturing careers among youth in partnership with the K-12 system, as part of the Career Literacy initiative described below. Special efforts have to be made to overcome the bias against manufacturing employment that often steers young people away from what can be challenging and well-paying careers;
- collaboration between manufacturers and post-secondary training providers to develop customized training programs that are more responsive to employer needs. These efforts should take into account the full range of skill needs, including basic math and reading skills, computer skills, and “soft” skills such as communication, problem-solving, and working in teams.

Strategy 6: Develop a Regional Career Literacy Initiative Targeted at K-12 Education

The ability of the region's workforce to obtain family-wage jobs and to meet the needs of regional employers will be enhanced if emerging workers are assisted to define and pursue a career path. Many students in SECT do not connect learning to work. They need relevant information so that they can make an informed decision about possible careers and they are able to determine the competencies they need to achieve their goal. Raising the level of career literacy in the region, at both the high school and the community college levels, will require the cooperation of businesses and local academic institutions.

A number of activities are already underway in this regard, including the following.

- School systems serving 11 of the 21 communities in the region participate in the *Connecticut Learns* school-to-career system. These schools offer career certificates in some or all of eight industry-developed career clusters representing the bulk of jobs in the Connecticut economy. However, schools serving 10 communities, including New London, do not have state-approved programs.
- EWIB funds Project COOL! (Careers of Our Lives), a ten-month school-to-career, work-based learning program for “at risk,” in-school youth. Project COOL! places young people in a paid, mentored work environment where they can learn skills and gain industry knowledge. It serves 19 in-school youth each year.
- The region's two major hospitals organize periodic healthcare career exploration efforts with some local high schools, which include providing career information and organizing career days.
- Pfizer's SMART (Science & Math Are Really Terrific) Program partners with local school districts to implement programs that foster interest in science and math. Activities include an annual Science and Math Jamboree for middle school students, class visits and demonstrations, donations and grants, and “Careers in Chemistry,” a summer internship program for graduating seniors from Groton and New London high schools. Pfizer also participates in college internship programs, including one targeted to minority students.
- The region must build upon these activities to ensure that all students in the region are “career literate” by the time they complete high school. The business community should work with local school districts and higher education institutions to form a regional business-education partnership to promote career literacy and workforce preparedness. Elements of such an initiative might include the following:
 - a superintendent and business leader roundtable that brings business and industry leaders together to share information about regional careers and work opportunities and to increase career awareness, readiness, and planning of students;
 - increased participation by employers in a range of career experience programs, including summer enrichment programs, internships, job shadowing, mentoring, company tours, and career fairs;

- employer participation in employability skills training programs (e.g., resume writing and interviewing skills, workplace dress and behavior, communication skills);
- externship programs (i.e., workplace experience) for teachers and guidance counselors;
- web-based career exploration and diagnostic tools. This might include the development of a career literacy “portal” that guides the user thorough the process of evaluating careers interests, learning about career opportunities and making career decisions, and provides links to a wide range of related sites. The site could be targeted to students, parents, and educators;
- a “technology literacy initiative” to help educators bridge the gap between the current level of technology skill development in their schools and the basic level of technology literacy required in the high-performance workplace;
- technical assistance to school systems in introducing and expanding career literacy activities. This could include employer participation in the development of curricula and educational tools.

The successful implementation of this partnership would require the designation of an “intermediary organization” to strengthen relationships and coordinate collaborative initiatives between the business and educational communities. In many regions, regional chambers of commerce have established educational foundations to play this role. The Chamber of Commerce of Eastern Connecticut, should consider utilizing its existing foundation to spearhead this educational initiative. The CBIA Education Foundation has a number of programs in place to assist regional efforts.

Keys2Work: A Demonstrated Regional Career Literacy Tool

Keys2Work is a career development program involving work-skills testing and skills-based job matching for use by high schools and training organizations. Regional Keys2Work programs are currently operating in southwestern Pennsylvania, Jacksonville, Florida, and Syracuse, New York. The program provides tools to compare students’ academic abilities to career opportunities and earning potential; to strengthen schools’ career development, placement, and curriculum improvement programs; and to connect students’ academic achievement to jobs that match their skills. It does this by:

- assisting schools to administer the WorkKeys skills assessment test developed by American College Testing (ACT) that ranks skill levels in up to eight work-related skills categories (in this case, Keys2Work testing focuses on three skill areas — reading, applied math, and locating information);
- working with regional employers to profile the skill requirements of a wide range of available jobs using the same skills assessment scale on which test participants are ranked;
- providing a Web-based tool for those completing the test to match their skills against the requirements of specific jobs and apply for jobs matched to their skills; and
- providing aggregate testing data and instructional support to participating educational institutions.

Strategy 7: Engage Regional Economic Development Organizations in Policy Advocacy Around Critical Regional Education and Workforce Development Issues

Strengthening workforce development programs will depend in part on tapping additional resources from state, federal, and philanthropic sources. Workforce development organizations will be more successful in this regard if they have the strong support of a broader regional constituency, notably business and economic development leadership. ECWIB, TRCC, and other workforce development organizations should engage in discussions with local business, economic development, and political leadership to identify resource needs as well as public policy issues that require strong and unified regional advocacy, and develop a regional advocacy agenda. The following are some of the immediate issues for inclusion in this agenda:

1. Continue to support the timely consolidation of Three Rivers Community College (TRCC) campuses.

The region needs to continue to communicate strongly and with a unified voice to the state about the importance of timely completion of the Three Rivers Community College campus consolidation. Efforts should focus on ensuring that state funding commitments are maintained according to the currently anticipated timeline, if not accelerated.

2. Fill gaps in available degree and certificate programs.

Higher education providers should work with the EWIB, major employers, and industry and economic development organizations to identify gaps in higher education certificate and degree programs within the region and to advocate for the approval and funding of needed programs with the appropriate state higher education agencies. One potential focus of such efforts is bringing an associates degree program in radiological technology to Three Rivers Community College.

Strategy 8: Expand Construction Training Capacity to Maximize Resident Employment in New Development Projects

This CEDS identifies a number of SECT development priorities of both regional and local import. (See Chapter 5.) Among the regional priorities are transportation improvements, increased housing production, and development of the Thames River Heritage Park, all promising to generate additional construction activity and employment. In addition, local communities have identified a range of commercial, industrial, and residential development project priorities. Among these, the redevelopment of the Norwich State Hospital site is potentially the largest generator of construction employment, but many other planned local developments also involve new construction or renovation/reuse of existing properties.

Occupations in the construction trades include carpenters, electricians, plumbers, painters, construction equipment operators, and general construction laborers. Many occupations in the

construction trades are high-skill and very well-paying. The industry has become increasingly technologically advanced and skill requirements have increased accordingly. But it is often difficult to obtain jobs in the more skilled occupations, particularly for non-traditional workers, because of the difficulty of getting into apprenticeship programs.

The construction industry also provides considerable entrepreneurial opportunities. Many individuals who start in construction in entry-level jobs learn the business on the job and through various training opportunities and eventually start their own small companies.

Construction training capacity already in place within the region is limited. Formal classroom training is provided at the region's two vocational schools. Both Grasso Southeast Regional Voc-Tech in Groton and Norwich Regional Voc-Tech offer certificate programs in carpentry, electrical, and plumbing and heating. Norwich also offers a certificate program in heating, ventilation, and air conditioning (HVAC). Apprenticeships are provided through union locals, including the carpenters and painters unions, and local building contractors.

The region should take steps to build on this existing capacity to ensure that construction employment opportunities generated by new development are maximized for local residents. A potential model for such an initiative is the Hartford Construction Jobs Initiative, which has had a solid track record since its establishment five years ago and was recently attempted in New Haven.

Hartford Construction Jobs Initiative

Established in 1999, HCJI (also called the "Jobs Funnel") offers residents a system of outreach, assessment, case management, employability preparation, and job placement and retention services. The HCJI is a partnership between the Capital Region Workforce Development Board, the Connecticut Capital Economic Development Authority, the Hartford Foundation for Public Giving, the Connecticut Office for Workforce Competitiveness, Connecticut Light & Power, and community-based organizations throughout the city to fill the construction jobs with Hartford residents.

Connecticut Light & Power, Co-Opportunity Youth Build, and the building trades offer the necessary training and skills that prepare the project participants to move into careers in the construction field. HCJI placed over 250 Hartford residents in related construction employment through a pilot phase over a period of 18 months. Over the following three years, HCJI's goal is to place 750 Hartford residents who were not previously employed in the construction trades. HCJI seeks to place Hartford residents into apprenticeship training opportunities that will lead to journey person's status. These career-oriented positions include full fringe benefits and average starting salaries exceeding \$12 an hour. Currently, over 370 Hartford residents have been placed in the construction trades.

The Eastern Connecticut WIB should convene a group of stakeholders to review current training regional capacity in the construction trades and consider ways to strengthen capacity and create a more effective pipeline for connecting the region's residents to regional construction employment opportunities. Participants should include the region's two voc-tech schools, local building trade unions, and the Builders Association of Eastern Connecticut. Connecticut Light & Power, which played a leading role in HCJI, could also be invited to participate. Assistance could be solicited from the state Office of Workforce Competitiveness and other appropriate state agencies. A first step could be a field trip to meet with staff and partners of the HCJI to learn more about how the project was designed and implemented, what were the critical challenges, and what has contributed to successful outcomes.¹¹

¹¹ An evaluation of the HCJI prepared by Mt. Auburn Associates in 2002 also provides useful insights about the project.

GOAL FIVE: Enhance the regional quality of life, balancing vibrant urban centers, rural areas with open space, and sound suburban communities.

Southeast Connecticut's physical attributes — its rural landscapes, quaint villages and historic cities, and maritime heritage — contribute greatly to its appeal and will increasingly be a key competitive advantage for the region when people make decisions about where to locate their residence or business. Therefore, planning initiatives that reclaim, enhance, and protect these assets are essential to the region's future economic vitality no less than its quality of life.

Land use authority is vested with the individual towns that comprise the region. Yet, there is still a role for regional entities such as the Council of Governments. State statutes provide for regional Plans of Conservation and Development. Such plans must be considered when local Plans of Conservation and Development are prepared, which, in turn, are intended to inform local zoning policy. Moreover, the COG is a valuable source for planning information and best practices for all the municipalities in the region.

Strategy 1: Enhance the Downtowns of the Larger Cities in the Region

Norwich and New London are the historic urban cores of the region. Their continued vitality is of region-wide importance — all the more so since New London is a major gateway to the region for multiple modes of transportation; and Norwich is a regional center of healthcare and services straddling a busy state highway. While their downtowns collectively comprise a small portion of regional activity, they have an importance that goes beyond simple quantitative measures.

A detailed strategy for each downtown is beyond the scope of this CEDS document, and requires more extensive planning at the local level. However, based on interviews with municipal officials, reviews of past plans and studies, physical surveys of the downtowns, and trends in the local economy and real estate market, broad themes relating to the downtowns have emerged. This strategy, therefore, sets forth an overall direction to help define the roles these two downtowns can play in the region.

1. Reconceive downtown New London as a waterfront residential community.

The proposed residential strategy for downtown New London is not so much new as a shift in emphasis. Specifically, rethinking the downtown as a residential community is proposed as the organizing principle around which all the other downtown initiatives should coalesce. It builds on a number of private-sector projects already underway, and reinforces the findings and objectives of the New London Downtown Action Agenda (2001) and the City's CEDS plan. It also responds to current and anticipated market conditions, recognizing that Shaw's Cove and Fort Trumbull represent the future for office development in New London, and that a retail revival will not take hold until a positive change is made in the image of the downtown.

New London's downtown has a rare collection of assets. It enjoys unparalleled transportation access in the region. The waterfront location affords both views and recreation opportunities. The downtown has an excellent stock of historic buildings with fine architecture, and the growing retail base offers amenities within walking distance. The city's downtown strategy found that only a small increase in the capture rate of the retail trade area would be sufficient to fill nearly every storefront in the downtown. Yet, these assets will languish without significant new private investment in the downtown. At the current time, housing offers the best prospect for such investment.

A housing strategy for the downtown fulfills several economic development objectives:

- Housing development will leverage private capital in the near term to rehabilitate historic structures and reclaim underutilized urban land.
- This private investment will send a clear signal that New London is on the rise, and will help burnish and enhance the city's image regionally and beyond.
- This will aid in the city's efforts to recruit office developments and tenants to the Shaw's Cove and Fort Trumbull areas.
- New housing development will set the stage for the renewal of the downtown's retail and commercial base, not only by expanding the local market, but also by enhancing the downtown's image and perceived level of security and safety with a 24-hour population.
- The housing strategy also helps support the *creative economy*, by introducing a housing product in a vibrant urban setting that satisfies the needs and sensibilities of the new generation of creative workers entering the workforce.

It is anticipated that the private sector will take the lead with downtown housing development. However, there are several supporting activities that can be undertaken to facilitate development:

- Add residential buildings to the list of special permit uses in the CBD zone district (mixed-use buildings are currently on the list, but pure residential buildings should be allowed on side streets where commercial use is less viable).
- Inventory and prioritize available sites and buildings, and promote these to prospective developers through a marketing campaign.
- Continue the development of amenities that appeal to a residential population, such as the waterfront promenade.
- Ensure that local codes facilitate the renovation of older buildings for housing.
- Provide subsidies, if necessary, for particular types of housing, such as artist live/work space.

2. Reposition Norwich as a regional center for entertainment, dining, and unique shopping.

Positioned between three rivers, Norwich originally grew where it did because of its strategic location for rail and waterborne transport. Today, Norwich is bypassed by many of the main highway routes, and is no longer the center of gravity for its region. Downtown Norwich's jumble of narrow streets makes it difficult to accommodate a large number of vehicles and limits the amount of on-street parking that can be provided. And, although Norwich now hosts significant pass-by traffic on Route 2, most of this is casino-related. In short, Norwich no longer has many of the attributes that would make it a desirable retail or commercial location.

However, Norwich's streets, its historic architecture, and its waterfront location do make it a viable location for specialty stores, restaurants, entertainment, and other leisure time activities. Ideally, these activities would occur at times when the downtown is least congested and the existing parking supply most available, such as evenings and weekends. Successful uses will be something that people are willing to go out of their way for, unlike convenience retail where visibility and ease of access is paramount.

While tourism may hold some prospects for bolstering market support for downtown Norwich, in the short-term its appeal will primarily be regional. Norwich already has successful cultural attractions such as the Spirit of Broadway Theatre. A business recruitment strategy focusing on dining, especially ethnic and unique dining, would complement Norwich's existing assets. Were Norwich to be established as a dining destination, specialty retail would be the next logical target to fill the downtown's remaining storefronts. A four-point strategy is recommended:

- Focus initial business recruitment efforts on restaurants that do their prime business in the evening when on-street and surface parking are most available.
- Address appearance and security issues to attract more evening visitors. People will not come to Norwich after dark unless it is perceived as clean and safe.
- Partner with existing attractions (such as Spirit of Broadway) to promote dining in downtown Norwich. Promotional materials and programs can provide information on local dining options.
- Focus on ethnic restaurants as part of the "regional newcomer" initiative. (See Goal Four.)

3. Emphasize culture and entertainment in New London and Norwich.

As noted, neither of the urban downtowns can directly compete with the malls for shopper's dollars. The downtowns can, however, offer something lacking in the malls — culture and unique entertainment. While many downtowns in Connecticut and elsewhere are looking to create new cultural attractions to lure people after dark, Norwich and New London already have established and successful cultural venues: the Spirit of Broadway in Norwich, and the Hygienic Artists Cooperative and the Garde Arts Centre in New London. Building on these attractions, the goal should be to establish both downtowns as *the* places to go for a night out.

Note that this strategy runs up against the fact that both casinos, and particularly Mohegan Sun, offer their own significant nightlife attractions, and have the financial power to book national acts. To effectively compete in this landscape, the downtowns must differentiate themselves:

- The average casino patron remains middle-aged and older. The downtowns should cultivate venues that appeal to a more youthful market.
- In the opposite direction, the casinos, with their emphasis on gambling, are not suitable for families. Therefore, emphasis could also be placed on more family-friendly shows and events.
- The downtowns can complement the cultural venues by nurturing a more eclectic set of dining options.
- Further, the downtown should look to create additional new arts-related special events, such as gallery and studio walks, theater, music, or film festivals, etc. (See also Arts and Creative Industries under Goal Two.)

4. Develop a comprehensive circulation and parking strategy for Norwich.

Norwich's downtown street pattern is like a knot. The city's location at the junction of two rivers, as well as its hilly topography, has produced a dense jumble of streets that are difficult for the casual visitor to navigate. This street pattern is an important part of the downtown's ambience and charm. However, the one-way street patterns that have been imposed on the downtown in an effort to ease traffic flow have made it difficult, confusing, and frustrating for visitors to reach the heart of downtown Norwich. This, in turn, has sapped the vitality of the downtown for retail by diminishing its access and visibility. Improving business conditions in the downtown requires that the street network be rationalized so that the center is easier to find and access.

It is, therefore, recommended that a comprehensive study be undertaken of downtown circulation, with equal emphasis on the needs of business and pedestrians as on the through-movement of vehicles. Such a study would seek to accomplish the following:

- rationalize and clarify the downtown street network;
- optimize the management of street and surface parking;
- provide for enhanced pedestrian connections throughout downtown, and particularly across Route 2 to the waterfront.

5. Partner with the Main Streets to explore an ethnic shopping strategy for New London and Norwich.

The casino's demand for labor has fueled a new wave of immigration into Southeast Connecticut, much of which has settled in Norwich and New London. If history is any guide, some of these newcomers will look to open their own businesses, typically retail or service-oriented, and occupying the sort of low-cost space found in older downtowns and neighborhood commercial strips. The initial market orientation for these businesses will be to serve the same ethnic group as the owner. Yet, through outreach and technical assistance, it would be possible to

help these new entrepreneurs broaden their market base without sacrificing their primary clientele.

An example is Manhattan's Chinatown. While a well-known tourist destination, most of the stores in Chinatown in fact cater primarily to Chinese immigrants. However, many of these stores have found that they can sell the same goods to westerners and others, as long as the merchandising is done in such a manner that non-Chinese feel comfortable navigating the store and can understand the goods and pricing. Many other types of ethnic shops offer a wealth of unique goods that would have broad appeal if marketed appropriately.

It is, therefore, recommended that the Main Streets partner as part of the Regional Newcomer Initiative (see Goal Four) to offer technical assistance to ethnic merchants to assist with presenting their merchandise to a broader clientele. Relatively simple actions are called for — attractive window displays, displaying signs and information in English as well as the native language, and advertising in publications with broad circulation, etc.

6. Consider establishing “WiFi” zones in downtown Norwich and New London

Some municipalities have either implemented, or are studying the implementation of, municipally-sponsored Wireless Access Points (WAPs) for the Internet, using Wireless Fidelity (WiFi) technology. Such access points can currently be found in public and quasi-public spaces ranging from airports, to public parks, to some Starbucks coffee shops. WAPs that provide free access can be accessed by anyone within range and equipped with a computer with the proper wireless network card. Others function as Virtual Private Networks (VPNs) and require secure authentication.

Municipalities for one of two reasons typically implement wireless networks: (1) to network together municipal offices (fire, police, etc.) at a lower cost than a wired network; and (2) as a promotional or economic development tool to attract business. Often, the idea is to promote development in a certain area, such as a downtown.

A publicly-accessible WAP in downtown New London or Norwich could be a great marketing and promotional tool for either downtown. It would attract people to public and quasi-public areas such as parks, train and transit stations, restaurants and coffee shops, where they could tap into the free Internet access. It could serve as a recruitment tool for small businesses and residences alike, by reducing (to close to zero) the cost of providing Internet access in older buildings where the installation of such infrastructure can be expensive.

Salem, Massachusetts, is currently installing a special type of WAP, known as an “urban hotzone,” modeled after the first such hotzone pioneered on Newbury Street in Boston. The urban hotzone differs from other models in that the entire zone is served by a single high-speed line (like a T1) connected to a central antenna, which services connections with a dispersed array of hotspots in local businesses and other locations. The startup costs for a hotzone are modest, meaning that they can be sponsored by one of the Main Streets with support from one or two business backers, and small monthly payments from merchants and property owners. These payments are so low that for many retail businesses the attraction of a single repeat customer is

sufficient to offset the annual costs. Each centralized antennae can connect hotspots up to a quarter mile away, making it ideal for compact downtown areas.

Strategy 2: Promote Regional Sustainable Land Use Policies

The Southeast Connecticut region is blessed with scenic waterfronts, pastoral rural landscapes, quality suburban communities, quaint towns, and historic cities. This desirable physical environment is a key competitive advantage, and a fundamental source of the region's high quality of life. The protection, preservation, and enhancement of these assets is, therefore, good economic development policy in addition to being good planning. Further, the components that make up such a strategy — including agricultural preservation, open space preservation, cluster development, infill development, and urban revitalization — all fall under the broad rubric of “smart growth,” which is the planning phrase *du jour*.

1. Develop smart growth policies that support and complement regional economic development.

The basic goals of “smart growth” — encouraging infill development in urbanized areas and other locations with infrastructure, while discouraging greenfield development and emphasizing multi-modal transportation options — fit perfectly with the general planning framework outlined in this CEDS. This is because such policies represent good economic development policy in Southeast Connecticut, as they protect and preserve the region's core physical assets — its rural landscapes, historic centers, and waterfronts.

While smart growth policies can be applied at the municipal level with some effectiveness, they are more regional in nature. The COG, through its regional Plan of Conservation and Development, can have some impact in promoting such policies regionally, although little real power flows from such plans. The starting point must be a regional consensus of what a “smart growth” future for the region would look like, and how it would play out at the local level in terms of land use and development policy. From this basis, it would be clearly up to the constituent towns to carry this vision forward.

Tax base and revenue sharing and/or other forms of property tax reform have been repeatedly referenced in this document as a prerequisite for forging lasting solutions on any number of issues, from affordable housing to the provision of infrastructure to important sites. Such ideas are not new in Connecticut, but the barrier to their implementation is formidable. However, it is just as true that without such reforms, land use policies at the local level will continue to be driven primarily by a chase for ratables rather than a sound regional planning vision. Efforts to implement smart growth on a regional basis will forever be running up against this barrier, absent a major impetus from the state that would make such planning both feasible and effective, if not mandatory.

2. Preserve and enhance the historic built environment.

The region's history and wealth of historic areas and structures is a large part of its appeal to residents and tourists alike. Mystic Seaport: the Museum of America and the Sea and Downtown Mystic, two of the region's largest non-casino tourist draws, leverage the maritime

history of the region. The revitalization of the largest urban areas — Norwich and New London — will be driven in part by their historic character and charm. The preservation of the region's historic built environment is, therefore, central to its economic health. Historic preservation is not new to the region, and there are a variety of tools, many already in use, to prevent the destruction of the historic fabric:

- *Historic districts.* Areas meeting certain criteria can be added to the State and National Registers as historic districts. While not carrying any additional regulating authority, buildings in such districts can take advantage of certain tax breaks supporting rehabilitation and reuse.
- *Historic district zoning.* Historic district zones can provide an overlay on underlying zoning, more tightly regulating new construction, additions, renovations, and signage.
- *Design guidelines for new infill development.* New development in historic areas should be subject to a more stringent set of design guidelines, oriented less towards mandating faux historical styles, and more towards ensuring compatibility of form, bulk, and materials.

3. Protect and preserve the region's rural places.

Southeast Connecticut still has vast tracks of undeveloped, rural land. Yet, much of this land is zoned for residential use at one- and two-acre densities. The combination of time and continued housing demand could result in the eventual conversion of much of this land into residential subdivisions. As development pressures grow, efforts to preserve rural land will become ever more difficult and expensive. Accordingly, there is every reason to put in place today the tools and policies that will help preserve rural lands into the future.

Many communities have turned to large lot zoning to forestall suburban sprawl. Yet, such zoning can have the opposite effect, increasing the rate at which land is consumed, and exacerbating housing affordability issues. Moreover, such policies do nothing to address the continued viability of agriculture as a land use. A more creative bundle of policies is called for. As examples:

- Implement cluster and conservation subdivision zoning in low-density rural areas. Cluster zoning allows for smaller lot sizes with a portion of the site set aside as preserved open space. Clustering can either be incentivised (through bonuses over the base density) or mandated.
- Use a variety of tools to promote and preserve agriculture. These include “right to farm” ordinances that insulate farmers from nuisance complaints; policies to promote agriculture as a viable industry such as a focus on agri-tourism and value-added; and outright purchases of agricultural easements and development rights.
- Participate fully in the Connecticut State Open Space and Watershed Land Acquisition Program to purchase and preserve key open space resources.
- Use tools such as Transfer of Development Rights (TDR) to reinforce historic centers while protecting rural lands. Under a TDR scheme, owners of farms and open spaces can sell their development rights for use in “receiving areas.” The success of such a scheme

depends upon the right balance of sending to receiving areas, and a property market strong enough to impart value to the transferred credits.

4. Emphasize high design standards for new development.

New retail and commercial development will occur in the region. If recent history is any guide, much of it will be located at highway exits and along arterial roadways. But there is no reason that future development has to exemplify the much-reviled sprawl strips that are found along the nation's highways. Indeed, the region has both the ability and every incentive to demand better. Design standards must respond to local community values. The following are provided as suggestions:

- In historic centers, encourage zoning that reinforces the existing built character, using “build-to” lines, prohibiting front yard parking, etc.
- Encourage the use of traditional New England architectural motifs in new developments.
- Implement access management regulations along commercial corridors to limit curb cuts and promote shared access.
- Require a higher level of landscaping and tree plantings in commercial parking areas.
- Control the size and intensity of signage in commercial districts.

Strategy 3: Enhance Recreation Opportunities and Protect Open Space

1. Increase shoreline access and trails wherever possible.

The shorelines along Long Island Sound and the Thames River (as well as other waterbodies such as the Shetucket River) are one of the region's incomparable assets. Yet, in many areas, access is limited. The promotion of more and better access to the water's edge should be a fundamental principle guiding future planning and development. As examples:

- Emphasize pedestrian walks and bikeways along waterfront locations. Such emphasis reflects the growing movement to use planning as a tool to encourage more physical activity as a matter of public health.
- Prioritize the completion of a continuous public esplanade from downtown New London to Fort Trumbull. The walkway will serve as a key amenity attracting new residents to downtown, and new offices to Fort Trumbull and Shaw's Cove.
- Encourage and/or mandate public access as part of future waterfront developments. Such requirements could be written into local ordinances or incorporated into Municipal Development Plans for old mills sites, for example.
- Develop exhibits and attractions that celebrate the ecosystems of the region's coastal areas. Partner with UConn to identify such opportunities. Such interpretive exhibits need not be confined to nature areas, but could be incorporated into public beach areas, the Thames River Heritage Park, public esplanades, etc.

2. Develop tourism strategies that enhance open space and recreational assets for residents and visitors alike.

See tourism section under Goal Two.

3. Develop initiatives to preserve agricultural lands and other open space.

See agriculture section under Goal Two.

CHAPTER V:

IMPLEMENTATION PLAN AND BENCHMARKS

Implementing the Plan

The following guidelines are intended to help the CEDS Implementation Committee (CIC) implement the region's economic plan.

- ***Maintaining momentum is critical.*** The plan needs to move forward on several fronts. Even though economic development is a long-term effort, short-term progress is very important to maintaining community support. We propose to update the CEDS through quarterly meetings, so the Committee knows about the short-term and long-term progress related to the CEDS.
- ***Starting with several projects or programs that are relatively simple to implement.*** For example, certain programs will be singled out for immediate attention so that we can demonstrate some tangible results within the first six months. This list will be completed no later than September 2004. This gives the implementation effort a degree of credibility that is often needed at the beginning of an economic development initiative.
- ***Engaging all stakeholders early in the implementation process is important.*** This CEDS is comprehensive and needs to engage all of the relevant stakeholders in the southeastern Connecticut region if it is to be successful. The collaboration needs to occur with the cities and towns, other regional organizations, the business community, as well as the state of Connecticut. While seCTer and SCCOG should be the lead agencies responsible for plan implementation, buy-in from all stakeholders needs to be attained.

Monitoring and Evaluating the CEDS

There is clear consensus in the southeastern Connecticut region that it is again time to implement a new strategic plan. The CEDS Strategy Committee feels strongly that a system needs to be in place to ensure continual progress.

Toward that end, the monitoring and evaluation process will have two major elements:

1. ***Quarterly reports generated by seCTer staff and submitted to the CEDS Implementation Committee.*** seCTer staff will write a brief report on progress to date in reaching the performance milestones in the implementation matrix. The Implementation Committee will identify any significant barriers and constraints to implementation based upon this report and will help to facilitate a process for moving the action steps forward.
2. ***Annual Regional Implementation Team Meetings.*** seCTer will coordinate and lead annual meetings of the CEDS Strategy Committee with all key stakeholders that focus specifically on progress in implementing key elements of the CEDS. These meetings will

also be an opportunity to troubleshoot coordination issues as well as to mobilize around any new economic development opportunity that arises in the region. We are considering planning a one-day retreat with elected officials, key business and community leaders, and other stakeholders to confirm priorities established under the CEDS and to reinforce assignments of responsibility to key implementing organizations.

Managing the CEDS — Oversight

The CEDS Strategy Committee, which has overseen the development of the CEDS, will oversee the implementation of the CEDS and will host an annual meeting of all key stakeholders in the region. The CEDS Implementation Committee will be comprised of members of the CEDS Strategy Committee along with SCCOG and seCTer staff. The CIC will meet quarterly to monitor progress in implementation and report on it to the CEDS Strategy Committee.

At the first meeting of the CIC, it will review the initial prioritization of Goals/Strategies/Action Steps and Projects that may be eligible for funding. Later in this section, we will further explain that role and provide a matrix of both qualitative and quantitative measures that will be used to prioritize these Action Steps and Projects.

The seCTer and SCCOG staff will be the primary interface with the CEDS Strategy Committee — working with its chairperson, scheduling quarterly CIC meetings, maintaining minutes, and reporting to the full committee. The CIC will make quarterly reports to the full seCTer and SCCOG boards. The reports will review significant accomplishments and specific information on achieving benchmarks related to Goals, Strategies, and Action Steps.

The status of projects listed on the Project Summary Sheet and any changes in rating according to the approved matrix rating system will be included in this report. In addition, any changes in the CEDS priorities will require the consent of the Strategy Committee.

Methodology of Data Collection

The CEDS Implementation Committee will use several methods to ensure the implementation of the CEDS and to measure progress. Each of the five Goals has a number of Strategies and associated Action Steps. For each Action Step, the CIC will assign the following:

1. **RESPONSIBILITY:** The Lead Organization/Stakeholder that accepts ownership for implementing the Action Step, identified as follows:

BRHIP = Blue Ribbon Housing Initiatives Panel
 CCECT = Chamber of Commerce of Eastern Connecticut
 CIC = CEDS Implementation Committee
 CSBDC = Connecticut Small Business Development Center
 CSC = CEDS Strategy Committee
 CTEAST = Tourism District of Eastern Connecticut
 EWIB = Eastern Connecticut Workforce Investment Board
 GAC = Route 11 Greenway Authority Commission
 GTNC = City of Groton
 GTNT = Town of Groton
 MC&C = Mystic Coast & Country Travel Industry Association
 MCC = Greater Mystic Area Chamber of Commerce
 MNST = Main Street
 NCC = Greater Norwich Area Chamber of Commerce
 NCDC = Norwich Community Development Corporation
 NRWH = City of Norwich
 NLDC = New London Development Corporation
 NLON = City of New London
 SCCOG = Southeastern Connecticut Council of Governments
 SEAT = SouthEast Area Transit District
 seCTer = SouthEastern Connecticut Enterprise Region
 TRCC = Three Rivers Community College
 U/W = United Way of Southeastern Connecticut
 WTFD = Town of Waterford
 Etc.

2. PRIORITY: Assigned as follows:

HIGH = Critical to the Economic Strategy of SECT
 MED = Essential to the Economic Strategy of SECT or Critical to the
 Economic Strategy of a Municipality

LOW = Important to the Economic Strategy of SECT or a Municipality

3. TIME FRAME:

1-3 = Start within 1 year/finish within 3 years

3-6 = Start within 3 years/finish within 6 years

5-10 = Start within 5 years/finish within 10 years

ONG = Ongoing

4. PERFORMANCE MEASURE: The numerical month and year (e.g., 6/04 = June 2004) in which a specific Action Step Milestone is scheduled to be accomplished and the identification of the Milestone (e.g., Forum, Charette, Meeting, Report, etc.). In addition, status/progress will also be indicated with a numerical rating system as follows:

5 = Excellent – completion achieved

4 = Advanced progress – ahead of schedule

3 = Anticipate progress – on course to completion

2 = Behind schedule – more work needed to get caught up

1 = Strategy/Action Steps should be abandoned due to changing circumstances

With regard to the narrative commentary, members of the CIC and seCTer and SCCOG staff will discuss certain Action Steps and Strategies. Stakeholders will be consulted. A focus group may be established to gain further insight. The sum of these discussions may yield changes to Strategies and Action Steps. There will be documentation in a narrative form provided to the CEDS Strategy Committee before appropriate action is taken to significantly amend Action Steps and Strategies.

Rating Projects Eligible for EDA and/or Other Funds

The CEDS has assembled a list of projects from municipalities in the region. Each may be a candidate for EDA or other funding. The identification of projects, as well as the rating of projects, will be a shared responsibility of the CEDS Strategy Committee, the CIC, and SCCOG and will require the consensus of all three entities. A matrix to evaluate projects that includes three major categories has been developed. This matrix appears below and will be completed for each project that has advanced to the point where it meets EDA requirements and may be eligible for EDA consideration. A Project Review Form (see Attachment) must be completed by the appropriate municipality/sponsor for each project to be discussed and scored by the Strategy Committee, the CIC, and SCCOG. Clear linkage must be specified between the recommended Project and one or more Action Steps of the CEDS. For example: Town of Montville Project for

Regional Waterlink to Groton Watershed/Reservoir supports CEDS Goal Three, Strategy B, Action Step 2 (G3B2).

Project Measures Scoring Matrix:

A. Project Measures — Consistency with Regional Plans (45 POINTS):

- Consistency with CEDS Strategies and Goals (25 points)
- Consistency with SCCOG Regional Plan of Conservation and Development (10 points)
- Consistency with SCCOG Regional Transportation Plan (10 points)

B. Direct Economic Impact (25 POINTS):

- Contribution to Diversification (5 points)
- Job Retention and Creation (5 points)
- Private Capital Leverage (5 points)
- Government Capital Leverage (5 points)
- Tax Base Increase/Stabilization (5 points)

C. Feasibility (30 POINTS):

- Municipal Approvals (10 points)
- Financial Status (10 points)
- Legal Approvals (10 points)

Once the CIC determines the rating for a project, it shall be submitted to the CEDS Strategy Committee for approval and to the SCCOG for endorsement. The rating of all projects shall be reviewed and revised (as necessary) annually. The resultant ranking of projects shall establish a hierarchy for use in the determination of candidate projects considered eligible for EDA and/or other funding applications.

Goal One: Promote a more effective and efficient civic infrastructure that enhances collaboration around economic development and unites the region behind a common vision.

STRATEGIES AND ACTION STEPS	RESPONSIBILITY	PRIORITY	TIME FRAME	PERFORMANCE MEASURE
A. Establish a CEDS Implementation Committee				
1. Convene key organizations with region-wide focus	CSC	HIGH	1-3	9/04 MTTG 3
2. Hold a one-day Regional Economic Development Forum	seCTer/SCCOG	HIGH	1-3	9/04 FORUM 3
3. Meet regularly to coordinate implementation of CEDS and to evaluate its progress	CSC/CIC	HIGH	ONG	9/04 MTTG 3
4. Coordinate and assist in the implementation of region-wide initiatives	CIC	HIGH	ONG	9/04 MTTG 3
5. Minimize redundancy in support organizations by promoting collaboration and partnerships	CIC	HIGH	3-6	TBD TBD TBD
B. Research and Design Regional Fiscal Equity Initiative				
1. Increase awareness of residents and municipal leaders about the benefits of regional action	seCTer/SCCOG	MED	1-3	12/04 SEMINAR 3
2. Identify and implement service sharing projects	SCCOG	HIGH	1-3	12/04 THAMES BASIN PROJ. 4
3. Develop pilot tax sharing project (Refer to Goal Three, Strategy C)	seCTer/SCCOG	HIGH	3-6	TBD TBD TBD
C. Design and Implement a Regional Image Campaign				
1. Undertake a charette focused on regional “themes” to promote through an image campaign	CIC	LOW	3-6	3/05 CHARETTE TBD
2. Develop a common theme across regional marketing and promotional material	CSC	LOW	3-6	9/05 CAMPAIGN KICKOFF TBD
D. Build a More Diverse Leadership Base				
1. Create a community leadership program that includes a mentoring component	CIC/CCECT	MED	1-3	1/05 MOD PROGRAM 3
2. Encourage participation of community-based groups and organizations representing the minority community in regional civic activities	U/W	HIGH	1-3	9/04 MTTG 3

Goal Two: Ensure the continued strength of existing economic clusters while seeking to diversify the economy through the development of new employment opportunities

STRATEGY AND ACTION STEPS	RESPONSIBILITY	PRIORITY	TIME FRAME	PERFORMANCE MEASURE
A. Promote Small Business Development and New Entrepreneurship				
1. Establish a One-Stop Business Resource Center	CSBDC	MED	3-6	TBD TBD 3
2. Establish SECT Small Business Network	CCECT	MED	3-6	TBD TBD TBD
3. Develop initiative to support immigrant and ethnic entrepreneurship (part of larger Regional Newcomer Initiative)	seCTer/CSBDC	MED	3-6	12/04 NEEDS ASSESSMENT TBD
4. Target entrepreneurs in regional marketing campaigns	seCTer/CSBDC	MED	ONG	12/04 PROGRESS RPT 3
5. Develop a Business Calling Program	CCECT	MED	3-6	TBD TBD TBD
6. Promote youth entrepreneurship	EWIB	MED	3-6	TBD TBD TBD
B. Support the Growth of the Maritime Cluster				
1. Develop regional maritime infrastructure initiative	seCTer	HIGH	ONG	6/04 COALITION MTTG 3
2. Promote R&D and commercial applications related to maritime security	seCTer	HIGH	ONG	6/04 COALITION MTTG 3
3. Enhance linkages between the educational system and maritime activities	TBD	TBD	TBD	TBD TBD TBD
C. Ensure the Continued Strength of the Region's Defense-related Facilities and Companies				
1. Support the activities of the Subase Realignment Coalition	seCTer	HIGH	1-3	6/04 COALITION MTTG 3
D. Promote the Region's Arts and Cultural Strengths as a Regional Economic Engine				
1. Establish a regional creative cluster council	seCTer/CTEAST	MED	3-6	TBD TBD TBD
2. Improve regional marketing of cultural programs and events	CTEAST	MED	3-6	TBD TBD TBD
3. Develop artist live-work space in downtowns and old mill buildings	TBD	TBD	TBD	TBD TBD TBD

E. Further Support the Region’s Tourism Industry and Ensure that its Development Provides Maximum Economic Benefits for Residents and Businesses in the Region						
1.	Update region-wide tourism development and marketing plan and build consensus on implementation priorities	CTEAST/MC&C	HIGH	1-3	9/04 MTTG	3
2.	Promote agricultural tourism	CTEAST/MC&C	MED	3-6	TBD TBD	TBD
3.	Develop one or more new events that promote regional “community building” and/or attraction of non-local visitors.	CTEAST/MC&C	MED	3-6	TBD TBD	TBD
4.	Establish cooperative initiatives with adjacent regions	CTEAST/MC&C	HIGH	1-3	9/04 MTTG	3
5.	Capitalize a regional tourism development fund	TBD	TBD	TBD	TBD TBD	TBD
F. Support Economic Opportunities in Agriculture to Create Jobs and to Preserve the Region’s Natural Landscape						
1.	Form a regional subgroup within the state’s agricultural industry cluster initiative to work on issues to support the retention and strengthening of the regional agricultural base	TBD	TBD	TBD	TBD TBD	TBD
G. Expand the Labor Pool for Regional Employers by Retaining More Older Workers in the Workforce		EWIB	MED	1-3	TBD TBD	TBD

Goal Three: Build the infrastructure needed to support the region's economic transformation

STRATEGY AND ACTION STEPS	RESPONSIBILITY	PRIORITY	TIME FRAME	PERFORMANCE MEASURE
A. Strengthen the Region's Intermodal Transportation System				
1. Concentrate transit efforts on two groups — tourists and casino workers	SCCOG/SEAT	HIGH	1-3	9/04 RPT 3
<ul style="list-style-type: none"> Partner with the casinos to improve transit where casino workers are clustered Explore the possibility of high-image, "fun" transit connections between the casinos and the intermodal terminal in New London, including use of the rail line, ferries, etc. Use seasonal transit service to link the region's numerous small tourist attractions 	SCCOG/SEAT	HIGH	1-3	9/04 RPT 3
2. Continue to promote New London as the transportation hub of the region	SCCOG/NLON	HIGH	ONG	TBD TBD TBD
<ul style="list-style-type: none"> Integrate all modes of transportation — Amtrak, local bus, ferry, and Interstate 95 Partner with Amtrak and a rental car company to provide easy and seamless access to rental cars at the train station and ferry terminal Consolidate other traveler information at the train station Focus on coordination and marketing to enhance existing infrastructure Explore the possibility of expanding Shoreline East service to New London 	SCCOG/NLON	HIGH	ONG	TBD TBD TBD
3. Extend Route 11 to Waterford and the interchange with I-95 and I-395 as the priority roadway (and associated Greenway) project	SCCOG/GAC	HIGH	ONG	9/05 EIS 2
4. Expand roadway capacity to the casinos, especially Foxwoods	SCCOG	HIGH	5-10	TBD EIS 2
B. Provide Sites and Utilities Needed to Support the Region's Economic Development Priorities				
1. Expand availability of appropriate sites with necessary access and utilities	SCCOG	MED	3-6	TBD TBD TBD
2. Provide support for the development of the Regional Water Network	SCCOG	HIGH	1-3	5/04 CONTRACT 4
C. Support the Development of New and Affordable Housing Options in the Region				
1. Adopt a "fair share" approach to equitably distribute regional housing responsibilities	BRHIP	HIGH	1-3	TBD TBD TBD
2. Adapt particular housing strategies for each community	BRHIP/SCCOG	HIGH	3-6	TBD TBD TBD
3. Aggressively pursue a revenue sharing strategy to offset costs associated with housing	BRHIP/SCCOG	HIGH	3-6	TBD TBD TBD
4. Encourage the State Legislature to strengthen the state's affordable housing laws	BRHIP	MED	3-6	TBD TBD TBD
5. Secure funding to sufficiently staff regional housing initiatives	BRHIP	HIGH	1-3	TBD TBD TBD

Goal Four: Promote career opportunities that move low wage workers into careers providing a family wage						
Strategy and Action Steps		Responsibility	Priority	Time Frame	Performance Measure	
A. Further Enhance the Positive Relationship between Workforce Development System and Economic Development						
1. Integrate regional and local strategic planning for economic and workforce development		EWIB	HIGH	1-3	1/05 RPT	3
2. Further engage regional chambers of commerce in the region’s workforce development activities		EWIB/CCECT/MCC/NCC	HIGH	1-3	1/05 RPT	3
3. Involve workforce development organizations in business expansion, retention, and recruitment efforts		EWIB/seCTer	HIGH	1-3	1/05 RPT	3
B. Establish a Regional Newcomer Initiative		TBD	MED	3-6	TBD TBD	TBD
C. Develop a Tourism Career Ladder Initiative						
1. Organize a collaborative effort involving key participants		EWIB/CTEAST/MC&C	MED	1-3	TBD TBD	TBD
2. Expand hospitality management degree program at Three Rivers Community College		TRCC	MED	3-6	TBD TBD	TBD
D. Develop Healthcare/Biomedical Training Initiative						
1. Develop an industry cluster approach to healthcare training		EWIB	MED	1-3	TBD TBD	TBD
2. Develop regional healthcare and biomedical career education and exploration program aimed at the region’s high schools		EWIB	MED	1-3	TBD TBD	TBD
E. Maintain and Augment the Capacity to Produce a Highly-skilled Manufacturing Workforce						
1. Develop longer-term strategy to replace retiring highly-skilled workers at EB and other advanced manufacturing firms in the region		EWIB	HIGH	1-3	TBD TBD	TBD
F. Develop a Regional Career Literacy Initiative Targeted at K-12 Education				TBD	TBD	TBD
G. Engage Regional Economic Development Organizations in Policy Advocacy around Critical Regional Education and Workforce Development Issues						
1. Continue to support the timely consolidation of Three Rivers Community College campuses		TRCC/NCDC/NRWH	HIGH	1-3	TBD TBD	3
2. Fill gaps in available degree and certificate programs		TBD	TBD	TBD	TBD TBD	TBD
H. Expand Construction Training Capacity to Maximize Resident Employment in New Development Projects		EWIB	MED	1-3	TBD TBD	TBD

Goal Five: Enhance the regional quality of life, balancing vibrant urban centers, rural areas with open space, and sound suburban communities					
Strategy and Action Steps	Responsibility	Priority	Time Frame	Performance Measure	
A. Enhance the Downtowns of the Larger Cities in the Region					
1. Reconceive downtown New London as a waterfront residential community	NLON/NLDC	MED	1-3	TBD TBD	TBD
2. Reposition Norwich as a regional center for entertainment, dining, and unique shopping	NRWH/NCDC	MED	1-3	TBD TBD	TBD
3. Emphasize culture and entertainment in New London and Norwich	NLON/NLDC NRWH/NCDC	MED MED	1-3 1-3	TBD TBD TBD TBD	TBD TBD
4. Develop a comprehensive circulation and parking strategy for Norwich	NRWH/NCDC	MED	1-3	9/04 RPT	3
5. Partner with the Main Street to explore an ethnic shopping strategy for New London and Norwich.	NLON/NLDC/MNST NRWH/NCDC/MNST	MED MED	1-3 1-3	TBD TBD TBD TBD	TBD TBD
6. Consider establishing Wireless Fidelity (WiFi) zones in downtown Norwich and New London	NLON/NLDC NRWH/NCDC	LOW LOW	3-6 3-6	TBD TBD TBD TBD	TBD TBD
B. Promote Regional Sustainable Land Use Policies					
1. Develop smart growth policies that support and complement regional economic development	SCCOG/MUNICIPALITIES	HIGH	1-3	TBD TBD	TBD
2. Preserve and enhance the historic built environment	SCCOG/MUNICIPALITIES	MED	ONG	TBD TBD	TBD
3. Protect and preserve the region’s rural places	SCCOG/MUNICIPALITIES	MED	ONG	TBD TBD	TBD
4. Emphasize high design standards for new development	TBD	TBD	TBD	TBD TBD	TBD
C. Enhance Recreation Opportunities and Protect Open Space					
1. Increase shoreline access and trails wherever possible	SCCOG	MED	ONG	TBD TBD	TBD
2. Develop tourism strategies that enhance open space and recreational assets for residents and visitors alike	CTEAST/MC&C	HIGH	1-3	9/04 RPT	3
3. Develop initiatives to preserve agricultural lands and other open space	TBD	TBD	TBD	TBD TBD	TBD

PRIORITY REGIONAL DEVELOPMENT AND INFRASTRUCTURE PROJECTS

Project Name	Further Description	Plan Consistency (45 Points)	Direct Economic Impact (25 points)	Feasibility (30 points)
Colchester				
1. Roadway improvements and utilities for Business Park Development Project				
2. Full Interchange on Route 2 at Exit 17				
3. Expand water capacity				
4. Extend sewer to planned development sites				
5. Downtown pedestrian enhancements	Sidewalk, landscaping, and streetscape upgrades between town center and sub center south of town			
East Lyme				
1. Exit 74 Access Road Business Development Project	Realignment of Exit 74 and new access road			
Franklin				
1. Expansion of Norwich Business Park	Park spans the Norwich/Franklin border (see Norwich)			
2. Commercial development on Rte 32				
3. Construct senior center				
4. Senior housing				
5. Old Route 32 Bridge across the Yantic River				
Griswold				
1. Route 164 retail	Recruit big box at Exit 85 interchange with I-395			
2. Route 201 development	Extend sewer line at Exit 86 interchange of I-395, extend sewer to proposed retail development on Route 164			
3. Jewett City façade improvements				
4. Jewett City Plastic/Triangle	Reuse as Industrial Site			
Groton				
1. Flanders Road Utility Extension – Groton Town	An area of Groton zoned IP 80-B (Industrial Park) has several existing businesses, but does not have water or sewer available, which impedes the growth of these businesses. Infrastructure funding for the extension of these utilities is needed.			

2. Redevelopment of Mystic Education Center – Groton Town	This facility, owned by the State of Connecticut, is substantially underutilized. With the proximity of the property to I-95, the potential for redevelopment of this site as a business incubator, small campus, or other similar uses should be studied.			
3. “Downtown” Route 1 – Groton Town	A study of the Downtown area will be undertaken shortly to determine its role in the local and regional economy. As a follow-up to this study, streetscape and pedestrian enhancements should be addressed.			
4. Bikeway/Trailway Plan – Groton City and Town	Implementation of the multi-use trails and bikeways recommendations that have been identified in the Townwide Groton Bicycle, Pedestrian, and Trails Master Plan.			
5. Linear Park Along Military Highway – Groton City and Town	A linear park along Military Highway should be designed as a way to provide increased public access to the waterfront of the Thames River and provide a connection between the USS Nautilus and the Thames Street Gateway area.			
6. Thames Street Revitalization – City of Groton	Perform comprehensive planning effort for riverfront development, building on recent development projects to enhance existing streetscape improvements and redevelop vacant and underutilized projects.			
Ledyard				
1. Route 12 Sewer Extension Project	Extension of sewer from Groton at cost of \$5.5 million to be accompanied by detailed corridor development plan			
2. Ledyard Center Business Development Project	Develop new village center at existing crossroads and provide associated infrastructure and façade improvements			
Montville				
1. Route 32 Economic Development Project	Rezoning, recruitment of retail tenants, access improvements, Route 32 functional and aesthetic enhancements including sidewalks and bike paths			
New London				
1. Fort Trumbull Municipal Development Plan	Additional funding for infrastructure			
2. Downtown Housing	Develop comprehensive plan, market feasibility, and coordinate effort to identify, prioritize, and market downtown buildings and sites			
3. Admiral Shear State Pier	Enhanced facilities including new warehouse, terminal building for ferries, additional parking, an office building, and a flex-industrial building			
4. Thames River Maritime Heritage Park	A heritage-based educational, cultural, and destination tourism development in New London and Groton			
5. Improvements to the Parade Area	Reconfiguration of the Parade and area around the Transportation Center to better link Downtown to the Waterfront			
6. Downtown Revitalization	Support and expand development of residential, commercial, retail, and the arts			

North Stonington				
1. Exit 93 Economic Development	Area adjacent to I-95 zoned for business, transfer of development to highway sites, new rotary to calm traffic and provide identity, restore access ramp improvements eliminated from I-95 upgrade			
2. Route 2 Operation and Public Safety Improvements	Support for improvements in geometry, access management, signalization, etc, but not four-lane option			
3. Exit 92/Route 2 Water System	Promote economic development of the Route 2 Corridor			
Norwich				
1. Downtown revitalization	Support and expand entertainment niche: restaurants, theaters, and specialty shops. Develop full spectrum of housing choices in the downtown area (including upper floors in mixed-use buildings) and on the waterfront. Emphasize historic rehabilitation and reuse.			
2. Downtown circulation and parking	Improve traffic flow and increase/enhance parking to support retail, restaurant, and entertainment businesses.			
3. Riverfront recreation	Streetscape improvements, bicycle and pedestrian trails. Preserve and develop public green space along riverfront. Improve connections between downtown and riverfront. Promote waterborne recreation through establishment of a community boating initiative and support of boating-oriented businesses.			
4. Ponemah Mill Restoration	High priority is reuse of riverfront mill sites for both housing and retail use. Need planning, market/feasibility studies before specific projects can be identified.			
5. Business park expansion	Priority project for the Norwich Community Development Corporation (NCDC)			
6. Transportation Center	Implement plans to construct a multi-modal transportation center on Hollyhock Island to promote downtown pedestrian traffic and transit connections between casinos and the intermodal terminal in New London.			
Preston				
1. Norwich Hospital Reuse	High visibility regional project			
2. Pequot Bridge Second Span Project	Improve access to Foxwoods Casino and relieve congestion			
3. Trolley Circulation Project	Use existing right of way to connect to Foxwoods, Norwich hospital site, Mohegan Sun, and Norwich transportation center			
Salem				
1. Age Restricted Housing Initiative	Zone for age restricted housing to improve tax base while minimizing school population growth.			
2. Route 11 and Route 11 Greenway	Complete extension of Route 11. Preserve open space along corridor to create greenway opportunities and a parkway environment along the roadway.			

3. Equestrian Initiative	Riding trails and horse farms.			
Sprague				
1. Baltic Mill Redevelopment Project	Proposed use as office park: feasibility study and brownfield remediation plan			
2. Business Park	Develop and implement Municipal Development Plan off Potash Hill Road adjacent to Route 138/Lisbon town line			
3. Downtown Revitalization Plan	Pedestrian circulation enhancements, new signage policy, overlay zone with historic protections, marketing and tenancing, commercial infill development			
4. Outdoor recreation/tourism initiative	Create Sprague Recreation and Tourism Commission and Sprague Land Management and Conservation Commission; acquire additional park and waterfront land along Setauket River; develop Baltic Mill Heritage Park around reservoir			
Stonington				
1. Riverfront Mill Site Reuse Initiative	Develop and implement reuse plan for 5 underutilized/vacant mill sites comprising 40 acres along the river in Pawcatuck's center. Establish new "industrial heritage" overlay zone.			
2. Transportation Center & Mystic Shuttle	Bus parking facility and public shuttle connecting Mystic area tourist attractions, Amtrak, marinas, downtown, and regional tourist transportation connectors			
3. South Pier Extension in Stonington Harbor	Extend the south pier approximately 300 feet at Stonington's town docks to accommodate and preserve the regional commercial fishing fleet			
4. Pawcatuck River Greenway	Establish public riverfront from Pawcatuck Point to North Stonington through preservation of existing open space through acquisition/easements, walkways through developed areas, and connections to existing public park areas.			
5. Stonington Borough	Reuse of former Velvet Mill and historic downtown streetscape improvement and undergrounding of utilities.			
6. Mystic Greenway Project	Connect Coogan Boulevard area to Downtown Mystic and Mystic Train Station via a series of pedestrian-oriented trails.			
Waterford				
1. Reuse of Airport Property Site				
2. Power-Related Business	Capitalize upon unused power generation at Millstone and re-licensing at Millstone			
3. Mago Point business district				
4. Revitalization of the Route 1 commercial district from intersection with 156 to New London				

Regional Initiatives				
1. Thames Basin Regional Water Interconnection Project	Implement plans to construct a regional water main spanning the Thames River to provide increased capacity and redundancy in the regional water supply network (Groton, Ledyard, Montville, Norwich, Preston, Waterford, and Mohegan Reservation)			
2. Route 11 and the Route 11 Greenway	Complete the extension of Route 11. Preserve open space along the corridor to create greenway opportunities and a parkway environment along the planned roadway (East Lyme, Montville, Salem, and Waterford)			
3. Route 2/2A/32 Project	Implement highway improvements to the Route 2/2A/32 Corridor (including a second span to the Mohegan-Pequot Bridge) to mitigate local casino associated traffic congestion (Ledyard, Montville, North Stonington, and Preston)			
4. Intermodal Connections Study Southeast	Implement tourist transportation system			
5. Blue Ribbon Housing Initiative	Implement solutions to problems identified in Regional Housing Study			
6. Intelligent Transportation System (ITS)	Construct a series of Variable Message Signs (VMS), video cameras, and radio transmitters along I-95 and I-395 in the region			

PROJECT REVIEW FORM: To be Filled Out by Municipality or Sponsoring Organization	
Consistency With CEDS Strategy and Goals	
Describe the relevance of the project to specific Goals, Strategies, and Action Steps in the regional CEDS.	
Describe the relevance and consistency of the project to the Regional Plan of Conservation and Development.	
Discuss any transportation-related impacts of the project and how they related to the Regional Transportation Plan.	
Direct Economic Impacts	
How does the project contribute to the economic diversification of the region?	
How many jobs will be created or retained as a result of the project?	
What are the total costs of the project?	
How much private funds are being leveraged?	
How much other government funds are being leveraged?	
What will be the fiscal impact of the project — total increase in state and local taxes?	
Feasibility of the Project	
Has the project gotten required municipal approvals?	
Describe the current status of the funding.	
Has the project obtained the required legal approvals?	

ATTACHMENT A: CEDS STRATEGY COMMITTEE LIST

CHAIRPERSONS				
Chairman	Thomas	Sheridan		Millstone Station
Vice Chairman	Angela	Arnold	Chairman	Chamber of Commerce of ECT
Vice Chairman	Grace	Jones	President	Three Rivers Technical-Community College
Vice Chairman	Paul	Brycki	First Selectman	Griswold Town Hall
COMMITTEE				
Mr.	John	Beauregard	Executive Director	Workforce Investment Board
Mr.	Richard	Brown	City Manager	City of New London
Mr.	Mark	Brown (Designee: Chuck Bunnell, Deputy Chief of Staff)	Chairman	Mohegan Tribal Nation
Mr.	James	Butler	Executive Director	SCCOG
Sen.	Catherine	Cook	Senator 18th District	CT General Assembly
Mr.	James	Cronin	President & CEO	Dime Savings Bank
Ms.	Jane	Dauphinais	District Director	Office of Congressman Robert Simmons
Mr.	Ken	Delacruz	President	Metal Trades Council, AFL-CIO
Mr.	Dan	Dennis (Designee: Fawn Walker)	President	NCDC
Mr.	Richard	Erikson, AICP	Chairman of Board	seCTer
Mr.	Gary	Farrugia	Publisher	The Day
Ms.	Mary Ann	Ferren	Director of Marketing	New London Mall
Mr.	Wayne	Fraser	First Selectman	East Lyme Town Hall
Rep.	Wade	Hyslop	Representative	CT General Assembly
Mr.	Jonathan	Jones		Dow Chemical
Dr.	Mary Ellen	Jukoski	President	Mitchell College
Mr.	Lee	Olivier (Designee: Tom Marano, Business Development Manager)		Northeast Utilities
Mr.	Andrew	Maynard	Warden	Stonington Borough
Mr.	Stan	Mickus	Director of Marketing	Cross Sound Ferry Service, Inc.
Mr.	Neal	Overstrom	Board of Directors	Mystic Coast & Country TIA (Mystic Aquarium)
Ms.	Janet	Pearce	Executive Director	United Way of Southeastern Connecticut
Sen.	Melodie	Peters	Senator 20th District	CT General Assembly
Mr.	Dennis	Popp	Mayor	Groton City Hall

Mr.	Keith	Robbins	First Selectman	Bozrah Town Hall
Mr.	Mike	Rottas	Community Affairs	Pfizer
Rep.	Kevin	Ryan	Representative	CT General Assembly
Rev.	Stephen	Schmidt	Pastor	St. Luke's Lutheran/Chairman United Action SECT
Mr.	Charles	Seeman	President	United Community & Family Services
Mr.	John	Shea	Chief of Human Resources	Electric Boat Corporation
Mr.	Nick	Smith	Owner	Stonington Vineyards
Ms.	Vivian	Stanley	Executive Director	Southeastern CT Convention & Visitor's Bureau
Rep.	Andrea	Stillman	Representative	CT General Assembly
Mr.	Bill	Sullivan	President	M J Sullivan Automotive Corner
Mr.	Douglas	Teeson	Executive Director	Mystic Seaport
Mr.	Michael	Thomas	Chairman	Mashantucket Pequot Tribal Nation
Ms.	Suzette	Tibus	Owner	Majestic Jewelers
Rep.	Diana	Urban	Representative	CT General Assembly
Mr.	David	Whitehead	VP/Corporate Communications	The William W. Backus Hospital
Rep.	Lenny	Winkler	Representative	CT General Assembly
Ms.	Mary Jo	Wlodecki	First Vice President	People's Bank
Mr.	John	Markowicz	Executive Director	seCTer
Ms.	Deborah	Donovan	Director of Marketing	seCTer
Ms.	Patricia	Glynn	Office Manager	seCTer
Ms.	Beth	Siegel	President	Mt. Auburn Associates

ATTACHMENT B: LIST OF INTERVIEWEES

1.	Pam	Adams	Connecticut Department of Environmental Protection
2.	Dennison	Allen	Town of Sprague
3.	Fred	Allyn, Jr.	Allyn Real Estate
4.	Maria	Angelos	Rensselaer Groton
5.	Alexis	Ann	The Resident Paper
6.	Kelly	Anthony	Lawrence & Memorial Hospital
7.	Jim	Avery	Thames Yacht Club
8.	Jackie	Barbarosa	Norwich Office of Tourism
9.	Ann	Barchini	Three Rivers Community College
10.	Tricia	Barkley	Greater Mystic Chamber of Commerce
11.	Walter	Barnard	Project Oceanology
12.	Lloyd	Beachy	City of New London
13.	John	Beauregard	Workforce Investment Board of Eastern Connecticut
14.	Andrew	Beaver	National Oceanographic & Atmospheric Administration
15.	Rev. Michael	Belt	St. James Episcopal Church
16.	Bret	Bernadini	Spirit of Broadway Theatre
17.	Faith	Bessette-Zito	Connecticut Department of Economic & Community Development
18.	Lena	Blanche	U. S .Naval Submarine Base
19.	Jeff	Blodgett	Connecticut Economic Resource Center
20.	John	Brooks	New London Development Corporation
21.	Stephen	Brown	Connecticut Department of Economic & Community Development
22.	Mark Brown	Brown	Mohegan Tribe
23.	Richard	Brown	City of New London
24.	Mark	Brown	Mohegan Tribe
25.	Paul	Brycki	Town of Griswold
26.	Bill	Budds	Smith Insurance
27.	Chuck	Bunnell	Mohegan Tribe
28.	James	Butler	Southeastern Connecticut Council of Governments
29.	Joe	Camien	Old Lyme Economic Development Commission
30.	Rick	Cardone	Office Support Systems
31.	Bob	Cardosa	Westerly Sun
32.	Patricia	Carey	Connecticut College
33.	Derrin	Carter	Mashantucket Pequot Tribal Nation
34.	Joe	Ciaudelli	RayVel
35.	George	Cassidy	CT Cruise Ship Task Force
36.	Sandra	Chalk	New London Landmarks
37.	Ann	Chambers	Eastern Federal Bank
38.	Marvin	Chase	North Stonington Economic Development Commission
39.	William	Christopher	Lawrence & Memorial Hospital

40.	Andrew	Ciminera	Southeastern Connecticut Water Authority
41.	Kristin	Clarke	Barun Basu Associates
42.	Cynthia	Clegg	Chamber of Commerce of Eastern Connecticut
43.	Edward	Clifford	City of Norwich
44.	Greg	Coenen	New London Development Corporation
45.	Bob	Congdon	Town of Preston
46.	Jenny	Contois	Town of Colchester
47.	Catherine	Cook	Senator, 18th District
48.	Bob	Cope	Hall Communications
49.	Nancy	Cowser	Thames Valley Council for Community Action
50.	Anthony	Cronin	New London Day
51.	Sam	Crowley	Ledge Light Health District
52.	Cinque	Dames	Mashantucket Pequot Tribal Council
53.	Jane	Dauphinais	Office of Congressman Robert Simmons
54.	Peter	Davis	City of Norwich
55.	Edward	Dear	Town of Stonington Economic Development Commission
56.	Deborah	DeCristoforo	Chamber of Commerce of Eastern Connecticut
57.	Bob DeSalvio	DeSalvio	Foxwoods Resort Casino
58.	Richard	DesRoches	Norwich Public Utilities
59.	Peter	Dibble	Town of Stonington
60.	Pat	Dixe	Norwich Human Services
61.	William	Donovan	Town of Griswold
62.	Michael	Doyle	Governor Rowland's Eastern Office
63.	Tina	DuBosque	Eastern Connecticut Symphony Orchestra
64.	Paul	Eccard	Town of Waterford
65.	Richard	Erickson	Southeastern Connecticut Enterprise Region
66.	Bud	Fay	Military Community Coalition
67.	Paul	Filippeti	Carlin, Charon & Rosen
68.	Tammi	Flynn	Florence Griswold Museum
69.	Catherine	Foley	New London Development Corporation
70.	Joanne	Frank	Foxwoods Resort Casino
71.	Wayne	Fraser	Town of East Lyme
72.	David	Gay	Connecticut Maritime Coalition
73.	Gerard	Gaynor	City of New London
74.	Kevin	Generous	Town of Sprague Economic Development Commission
75.	Craig	Gereias	Mashantucket Pequot Tribal Nation
76.	Robert	Giffen	Dime Savings Bank
77.	Simeon	Gillman	Real Estate
78.	Betty	Gladue	Three Rivers Community College
79.	Peter	Glinkoff	Mystic Seaport
80.	Brad	Glas	Hel-Cat Fishing
81.	David	Glaski	Connecticut Magazine
82.	Dave	Goebel	New London Development Corporation

83.	Rebecca	Gonser	Workforce Investment Board of Eastern Connecticut
84.	Aaron	Gooday	Mashantucket Pequot Museum
85.	Beverly	Goulet	Norwich Human Services
86.	Richard	Gudis, USN Ret.	Subase Realignment Coalition
87.	John	Guevermont	Mashantucket Pequot Tribal Council
88.	Dick	Guggenheim	Southeastern Connecticut Council of Governments
89.	Robert	Hamilton	New London Day
90.	David	Hammerstrom	Chelsea Groton Bank
91.	Ned	Hammond	City of New London
92.	Mike	Harris	ConnStep
93.	Susan	Hendricks	Alva Gallery/Lyman Allyn Art Museum
94.	Gretchen	Higgins	Artist
95.	John	Holder	Mashantucket Pequots
96.	John	Houglan	Connecticut Department of Economic & Community Development
97.	Susan	Howard	U.S. Properties
98.	Elliott	Huron	Norwich Bulletin
99.	Bruce	Hyde	City of New London
100.	James	Jackson	Mashantucket Pequot Tribal Nation
101.	Michelle	Jacobik	Sava Insurance
102.	Joseph	Jaskiewicz	Town of Montville
103.	Chris	Jennings	Mystic Coast & Country Travel Industry Association
104.	Colin	Johnson	Arrow Line/Peter Pan Bus
105.	Danielle	Johnson	Carlin, Charon & Rosen
106.	John	Johnson	Machine Works at Essex
107.	Jonathan	Jones	Dow Chemical
108.	Mary Ellen	Jukowski	Mitchell College
109.	Carmelina	Kanzler	City of New London
110.	Karen	Kari	Niantic Main Street Program
111.	Peter	Karpinski	Town of Waterford Economic Development Commission
112.	Nancy	Keenan	Groton Inn & Suites
113.	Patrick	Kennedy	Kennedy Marine Services
114.	Terri	Keyes	First Step
115.	Sheila	Knaust	US Properties
116.	Rick	Kramer	Norwich Main Street
117.	Jerry	Lamb	Naval Submarine Medical Research Center
118.	Art	Lathrop	City of Norwich
119.	Gregory	Leonard	Southeastern Connecticut Water Authority
120.	Carolyn	Leuze	New London Community Boating
121.	Walter	Lincoln	Lincoln Maritime
122.	Linnea	Lindstrom	Greater Mystic Chamber of Commerce
123.	Edith	Longhenry	Continuing Education Community College
124.	Kristin	Malinowski	The Resident Paper
125.	Saverio	Mancino	Mohegan Sun

126.	Lois	Maple	Visiting Nurse Association
127.	Tom	Marano	Northeast Utilities
128.	Eleanor	Mariani	Connecticut Department of Environmental Protection
129.	Gary	Marinelli	Yankee Gas
130.	Michelle	Mason	University of New Haven, SECT Branch
131.	Martin	Masters	North Stonington Economic Development Commission
132.	Richard	Matters	Town of Franklin
133.	Andrew	Maynard	Stonington Borough
134.	Thomas	McAvoy	Dime Savings Bank
135.	Ed	McCabe	ABC PhotoLabs
136.	Morgan	McGinley	The Day
137.	Richard	McInnis	Survival Systems
138.	Susan	Mendenhall	Town of Ledyard
139.	Andy	Meyers	U.S. Coast Guard
140.	Stan	Mickus	Cross Sound Ferry
141.	Robert	Mills	New London Development Corporation
142.	Christine	Miskell	Uncas Health District
143.	Bill	Monroe	Waterford Hotel Group
144.	Jerry	Morrison	Connecticut Department of Economic & Community Development
145.	Nicholas	Mullane	Town of North Stonington
146.	Michael	Murphy	Town of Groton
147.	Mick	O'Beirne	Town of Groton
148.	Michael	O'Connor	Southeastern Connecticut Water Authority
149.	Mark	Oefinger	Town of Groton
150.	Laura	Olenick	Girl Scouts
151.	Jerry	Olsen	Olde Mistick Village
152.	Robert	Olsen	US Coast Guard Academy
153.	Naomi	Otterness	Southeastern Connecticut Enterprise Region
154.	John	Oustrout	Connecticut Office of Tourism
155.	Neil	Overstrom	Mystic Aquarium & Institute for Exploration
156.	David	Page	U.S. Properties
157.	Tricia	Paisani	Connecticut Department of Economic & Community Development
158.	Brian	Palaia	Town of Ledyard
159.	Peter	Pappas	Connecticut Small Business Development Center
160.	Christine	Paquette	New London Job Center
161.	Chris	Parquet	Connecticut Department of Labor
162.	Penny	Parsekian	New London Main Street
163.	Meg	Parulis	Town of East Lyme
164.	Janet	Pearce	United Way Of Southeast Connecticut
165.	John	Pendleton	Logistec
166.	Richard	Podrugeil	City of Norwich
167.	Meg	Polubiatko	Dime Savings Bank
168.	Dennis	Popp	City of Groton

169.	Liz	Power	Pfizer
170.	Dick	Prisby	Whaler's Inn Mystic
171.	Paul	Provost	Norwich Bulletin
172.	Dennis	Pyskaty	Pfizer
173.	Kathleen	Radovitch	Connecticut Small Business Development Center
174.	Kenneth	Reels	Mashantucket Pequot Tribal Council
175.	Larry	Reitz	Town of Salem
176.	Murray	Renshaw	Renshaw Plumbing
177.	Jack	Ringelberg	Jamestown Marine Services
178.	Betsy	Ritter	Town of Waterford
179.	Bill	Rivera	Centro de la Comunidad
180.	Chris	Rixon	Mason's Island Real Estate
181.	Keith	Robbins	Town of Bozrah
182.	Karen	Roman	Dime Savings Bank
183.	Dave	Rossiter	Connecticut Department of Transportation
184.	Michael	Rottas	Pfizer
185.	Cindy	Rowin	The Day
186.	Neil	Ruenzel	Electric Boat
187.	Catherine	Russell	Eastern Area Health Education
188.	Steve	Ruzzo	Electric Boat
189.	Virginia	Sampietro	Workforce Investment Board of Eastern Connecticut
190.	Bill	Satti	Mashantucket Pequot Tribal Nation
191.	Vinnie	Scarano	Photographer/Hygienic
192.	Carley	Sebastian	Mashantucket Pequot Tribal Nation
193.	Jack	Shea	Electric Boat
194.	Bill	Sheehan	Ortronics
195.	Joseph	Sheffey	Child Adoption Resource Center
196.	Tony	Sheridan	Chamber of Commerce of Eastern Connecticut
197.	Tammy	Shourds	Mashantucket Pequot Tribal Nation
198.	Steve	Sigel	Garde Arts Center
199.	Isabell	Singer	Eastern Connecticut Symphony Orchestra
200.	Harry	Smith	Town of Colchester
201.	Easton	Smith	Easton B. Smith Real Estate Development and Brokerage
202.	Nick	Smith	Stonington Vineyards
203.	Tom	Sparkman	Town of Lebanon
204.	Vivian	Stanley	Connecticut East Regional Tourism District
205.	William	Stanley, Jr.	Lawrence & Memorial Hospital
206.	Gabe	Stern	Connecticut Municipal Electric Energy Cooperative
207.	Alan	Stevens	Connecticut Department of Transportation
208.	Craig	Stevenson	Town of Voluntown
209.	Jim	Stidfole	Hygienic Artists Cooperative
210.	Andrea	Stillman	State Representative, 38th District
211.	Barbara	Strother	Town of Groton

212.	Peg	Stroup	Three Rivers Community College
213.	Linda	Summers	Otis Library
214.	Paul	Suprin	Pequot Properties
215.	Richard	Sweeney	City of Norwich
216.	Sheila	Tabakoff	Norwich Arts Council
217.	Karen	Tarantino	Crystal Mall
218.	Teresa	Thesier	Mystic Information Center
219.	Suzette	Tibus	Majestic Jewelers
220.	Mario	Tristany	Town of Griswold
221.	Bill	Turner	SBC/SNET
222.	Diana	Urban	State Representative 43rd District
223.	Marjorie	Valentin	Three Rivers Community College
224.	Jason	Vincent	Town of Stonington, Town Planner
225.	Marcia	Vlaun	Town of Montville, Town Planner
226.	Arlene	Vogel	Connecticut Procurement Technical Assistance Program
227.	Tom	Wagner	Town of Waterford
228.	Jim	Walker	Mashantucket Pequots Real Estate
229.	Fawn	Walker	Norwich Community Development Corporation
230.	Pam	Walsh	Chocolates and More
231.	Jane	Walsh	Pequot Properties
232.	Gerry	Ward	ConnStep
233.	Jack	Wesa	Town of Voluntown Economic Development Commission
234.	Jim	Wherry	Mashantucket Pequots
235.	Jim	White	US Properties
236.	David	Whitehead	William W. Backus Hospital
237.	Dave	Wigfield	Stadium Motors
238.	Glenn	Wilson	Groton Utilities
239.	Frank	Winkler	Groton Utilities
240.	Claus	Wolter	Sea Pony
241.	Bob	Zarnetske	City of Norwich

APPENDIX A:

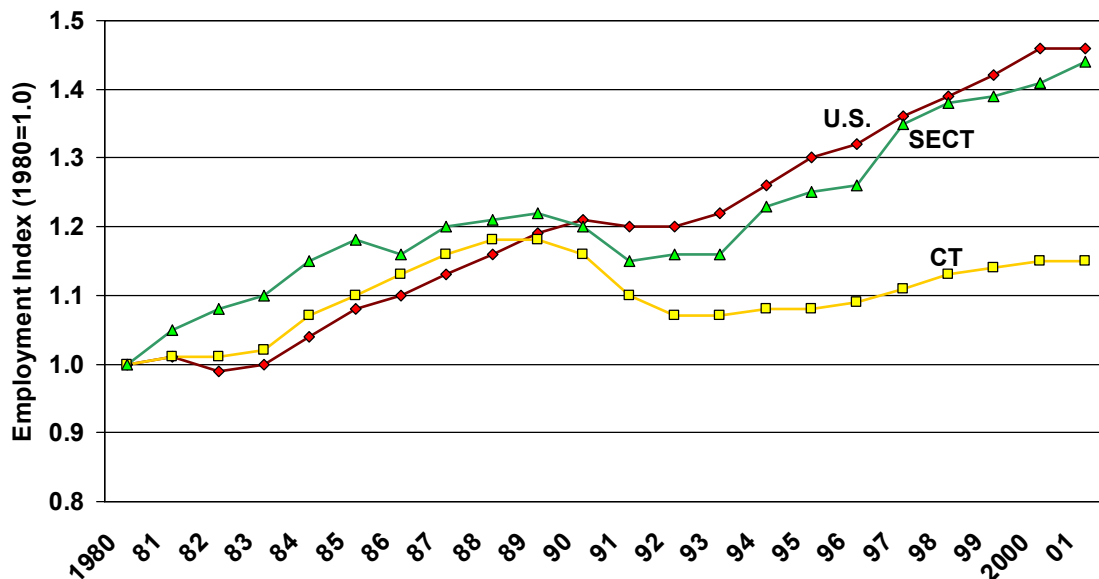
ECONOMIC OVERVIEW

Economic Performance

Employment

Between 1980 and 1989, as shown in Figure A.1, employment growth in New London County surpassed both the nation and the state. The growth was fueled primarily by defense contracts, which peaked in 1989 and declined rapidly during the early 1990s. As a result of the change in defense contracts, coupled with a real estate/banking collapse and cyclical shock, employment in New London County decreased during the early 1990s, although not as sharply as the state. The growth path for the region and the state began diverging in 1992 with the opening of the first casino. Since 1992, growth in the county has been primarily due to growth of the Foxwoods Casino, which opened in 1992, and the Mohegan Sun Casino, which opened in 1997. Today, these two casinos, the tribal governments associated with them, and subsidiary operations employ more than 25,000 people. Compared to employment growth in Connecticut, New London County's growth has been quite brisk due to the advent of the casinos. In 2002, employment in the New London County was approximately 127,700, according to the Bureau of Labor Statistics.

Figure A.1: SECT Employment Grew Almost 30 Percent During the 1990s



Sources: CT DOL and U.S. BLS

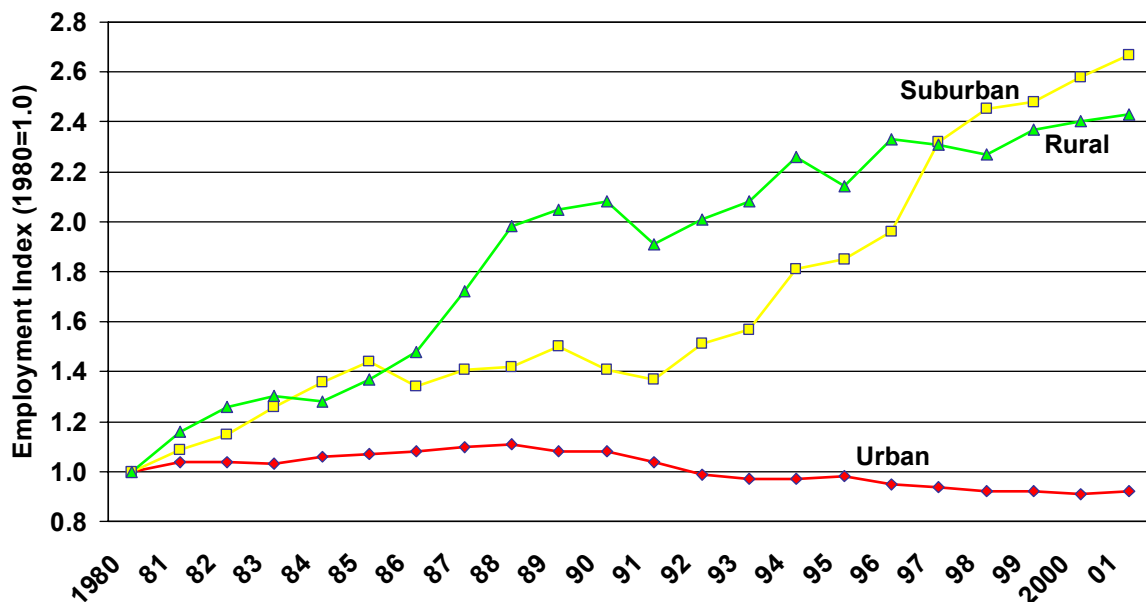
However, not every town in the Southeastern Connecticut (SECT) region has shared in this rapid employment growth. Since 1980, employment in the urban municipalities (Groton, New London and Norwich) has stagnated, and even declined slightly as seen in Figure A.3. Employment in the suburban areas including Ledyard and Montville, home of the two casinos (see Figure A.2 for list of towns and their classifications by population), grew somewhat and then increased rapidly after 1992. As for the rural towns, there was significant growth through the 1980s until the recession in the early 1990s. Since then, the rural areas have experienced moderate growth.

Figure A.2: Town Classifications by Population

Urban:	Groton	New London	Norwich
Suburban:	Colchester	East Lyme	Griswold
	Ledyard	Lisbon	Lyme
	Montville	Old Lyme	Preston
	Sprague	Stonington	Waterford
Rural:	Bozrah	Franklin	North Stonington
	Salem	Voluntown	

Source: *Housing a Region in Transition, An Analysis of Housing Needs Southeastern Connecticut, 2000 – 2005.*

Figure A.3: Employment in Suburban and Rural Towns has Grown Significantly While the Urban Areas Remained Basically Flat

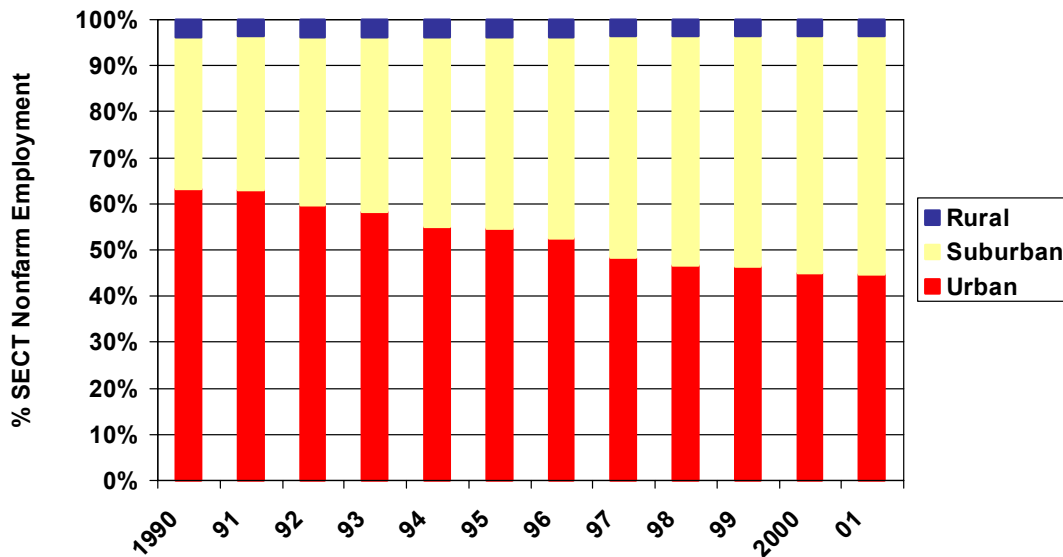


Source: CT DOL

Figure A.4 shows the result of the different growth rates in the suburban and urban towns. Since suburban communities are growing faster than their urban counterparts, the share of New London County's employment located in the urban areas

has declined from 62 percent in 1990 to 45 percent in 2001. Employment in the suburban areas has increased to almost 52 percent of the county's total.

Figure A.4: Suburban communities garner a larger share of new jobs



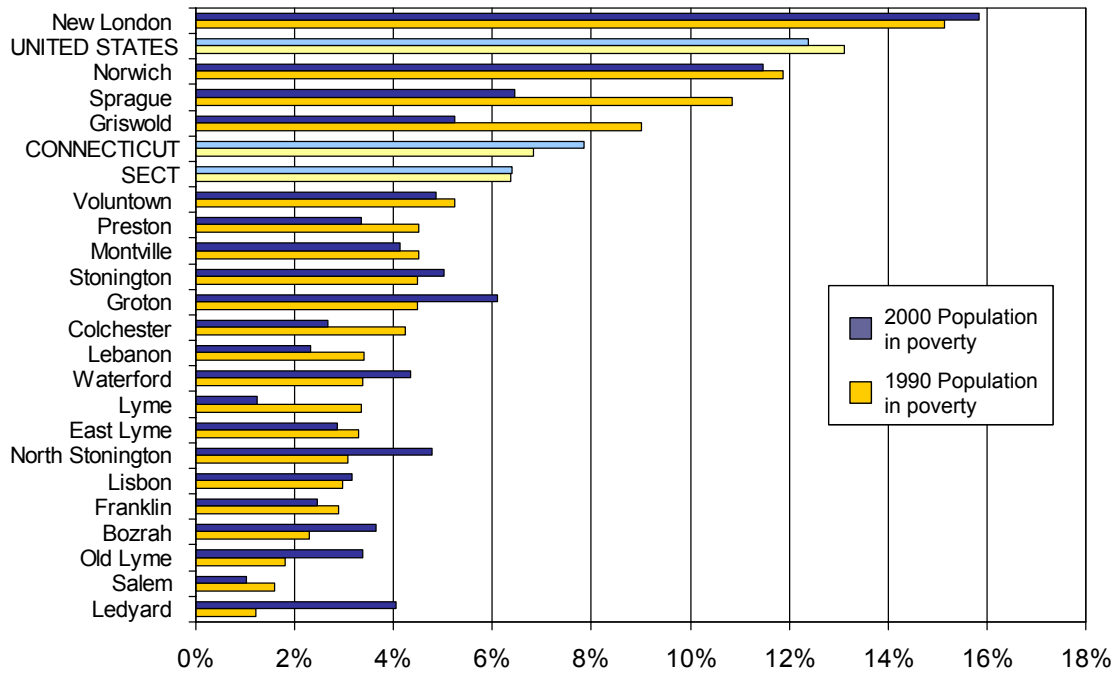
Source: CT DOL

Poverty

Poverty is as important a measure as median income in understanding the characteristics of a region. Figure A.5 shows the percent of the population in poverty for the U.S., Connecticut, SECT, and each of the towns in the SECT region. Only New London has a higher share of the population in poverty than the U.S. It is also important to note that the share of the population in poverty for New London increased during the 1990s. Some of the other towns in the SECT region that had poverty rate increases included most notably Ledyard with an increase from 1.2 to 4.0 percent, North Stonington with an increase from 3.1 to 4.8 percent and Groton with an increase from 4.5 to 6.1 percent. Old Lyme and Bozrah also had increases in the share of their populations in poverty larger than the increase of 1.0 percent seen for Connecticut.

These measures of poverty are based on family size but do not reflect regional cost of living differences. Thus, the comparison of poverty levels across the region and even within the state is probably better than comparisons with the U.S. Since the cost of living in Connecticut is higher than the U.S., one might expect that the measures of poverty in Connecticut underestimate the true poverty levels.

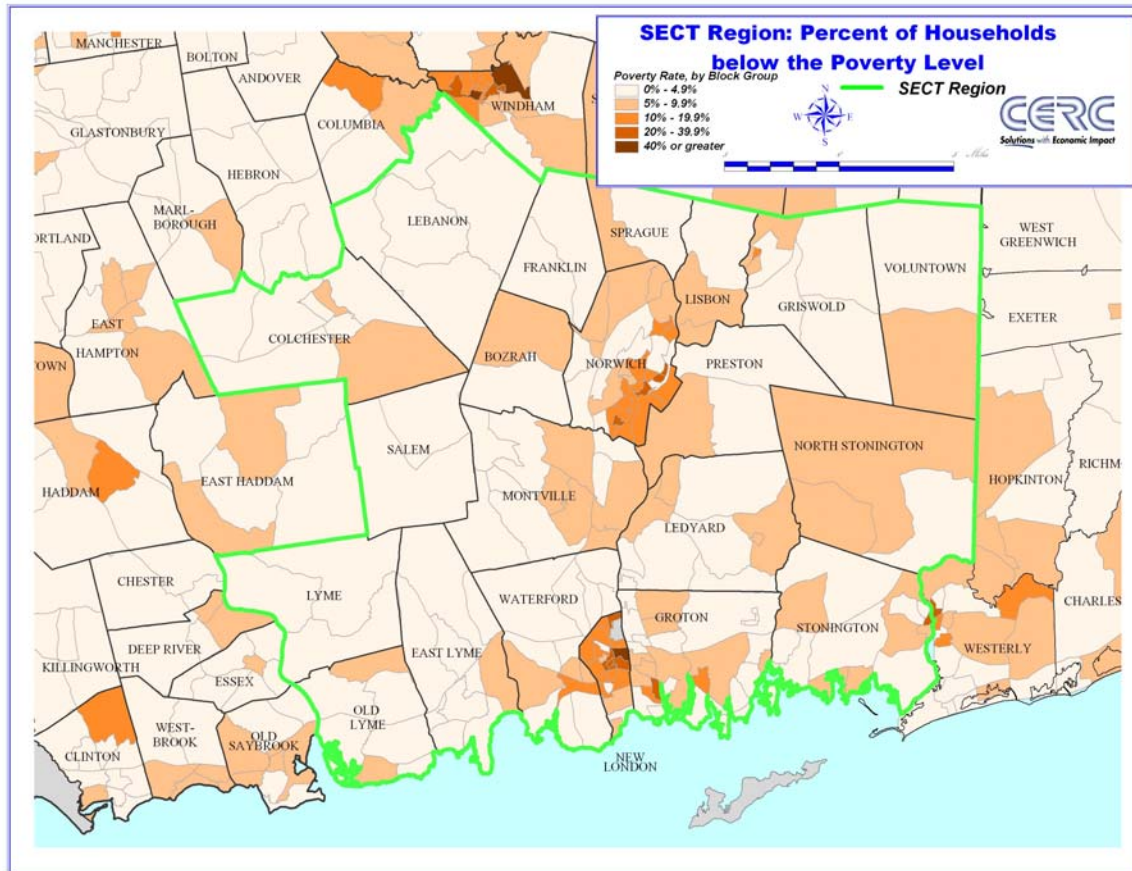
Figure A.5: Percent of Population in Poverty, 1990 and 2000



Source: Census Bureau

As Figure A.6 shows the distribution of households by income within the towns is not uniform and areas of high income and high poverty levels can both exist within any given town. Geographic pockets with high poverty levels will often be associated with some of the most significant social problems the towns and the region face. The concentrated areas of poverty shown in Figure A.6 in New London, Groton, and Norwich should be areas of special concern and attention for encouraging economic development and business growth in the region.

Figure A.6: Geographic Detail of Population in Poverty, 2000



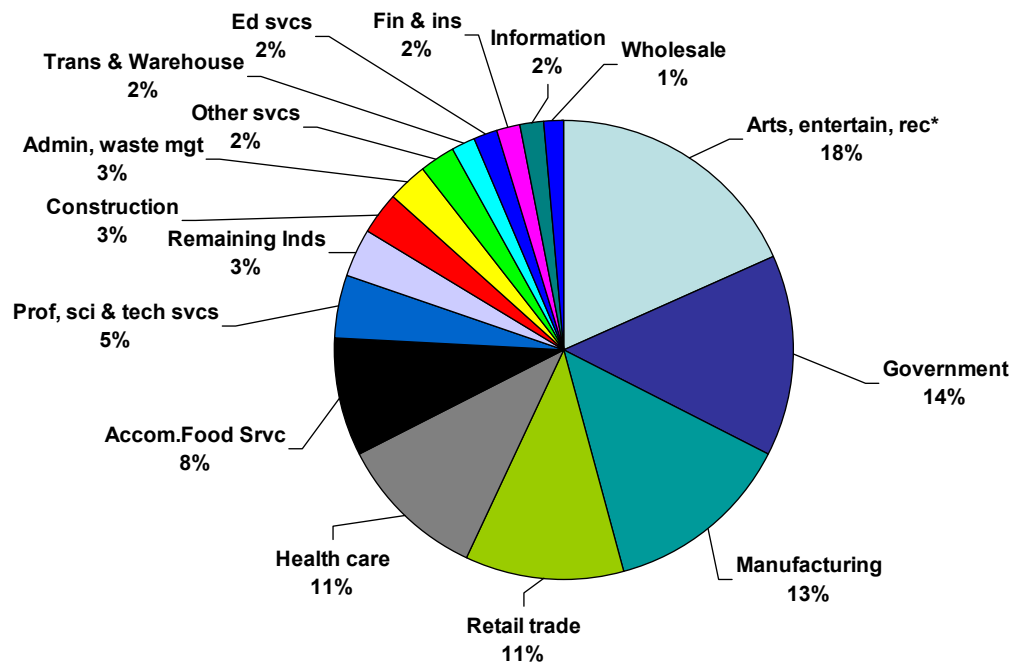
Source: Census Bureau, 2000 Census

Economic Structure

Employment by Industry

Figure A.7 shows that in 2002 nearly one-third of the employment in New London County is in the arts and entertainment, and manufacturing industries. A substantial share of arts and entertainment is due to the employment associated with the two Native American casinos. As for manufacturing, transportation equipment, which is basically defense-related, comprises more than half of the region's manufacturing employment, while drugs and chemicals are another 25 percent.

Figure A.7: New London County Employment by NAICS Sector, 2002



* Arts, entertainment and recreation employment adjusted to account for casinos.

Source: U.S. Bureau of Labor Statistics and CERC.

Figure A.8 focuses on the employment change by NAICS sector that occurred in SECT between 1990 and 2002. The arts, entertainment and recreation sector grew by more than 23,000 workers since 1990 when the sector barely had a presence in the area. The industry with the largest decline in employment by contrast was manufacturing which declined by more than 10,000 workers (-38.9 percent) since 1990. Even though manufacturing is still a source of employment for 17,100 workers in New London County, the trend, like the nation, is negative. The loss of the income from these typically high paying manufacturing jobs has also undoubtedly negatively affected the region. The annual average growth rate in the arts, entertainment and recreation industry at nearly 4.5 percent only slightly exceeds the negative annual average growth rate of 4.0 in manufacturing. Overall, the growth in employment at the casinos accounted for two of every three new jobs over the past 10 years. Absent the casinos, the regional economy would be significantly weaker and more vulnerable than it is today.

Figure A.8:
Tourism and entertainment account for the majority of new jobs in SECT

NAICS	Industry	New London Co Emp (1000s)		Growth (1000s)	
		1990	2002	# 90-02	% 90-02
71	Arts, Entertainment, & Recreation*	0.03	23.57	23.5	75943.4%
62	Health Care & Social Assistance	5.19	13.53	8.3	160.8%
72	Accommodation & Food Svcs	5.78	10.43	4.7	80.6%
44-45	Retail Trade	10.70	14.28	3.6	33.5%
54	Professional, Scientific, & Technical Svcs	3.48	5.86	2.4	68.4%
81	Other Svcs (except Public Administration)	1.24	3.13	1.9	152.6%
61	Educational Svcs	0.40	2.16	1.8	439.6%
56	Admin, Support, Waste Mgmt & Remediation	1.81	3.56	1.7	96.5%
23	Construction	2.80	3.93	1.1	40.0%
48-49	Transportation & Warehousing	1.60	2.27	0.7	41.9%
51	Information	1.43	2.00	0.6	40.0%
22	Utilities	1.09	1.61	0.5	47.1%
55	Management of Companies & Enterprises	0.32	0.56	0.2	72.3%
42	Wholesale Trade	1.67	1.88	0.2	12.2%
53	Real Estate & Rental & Leasing	0.60	0.62	0.0	2.0%
21	Mining	0.10	0.07	0.0	-26.3%
52	Finance & Insurance	2.23	2.04	-0.2	-8.6%
GV	Government**	19.50	17.80	-1.7	-8.7%
31-33	Manufacturing***	28.00	17.11	-10.9	-38.9%

* Includes estimates for casino-hotels.

** Does not include Indian casino-hotel employment.

***Adjusted based on BLS and CBP estimates.

Source: 1990 NAICS estimates-Economy.com, 2002 US BLS, CERC adjusted NAICS 71 with Casino Employment estimate.

Economic Base Industries

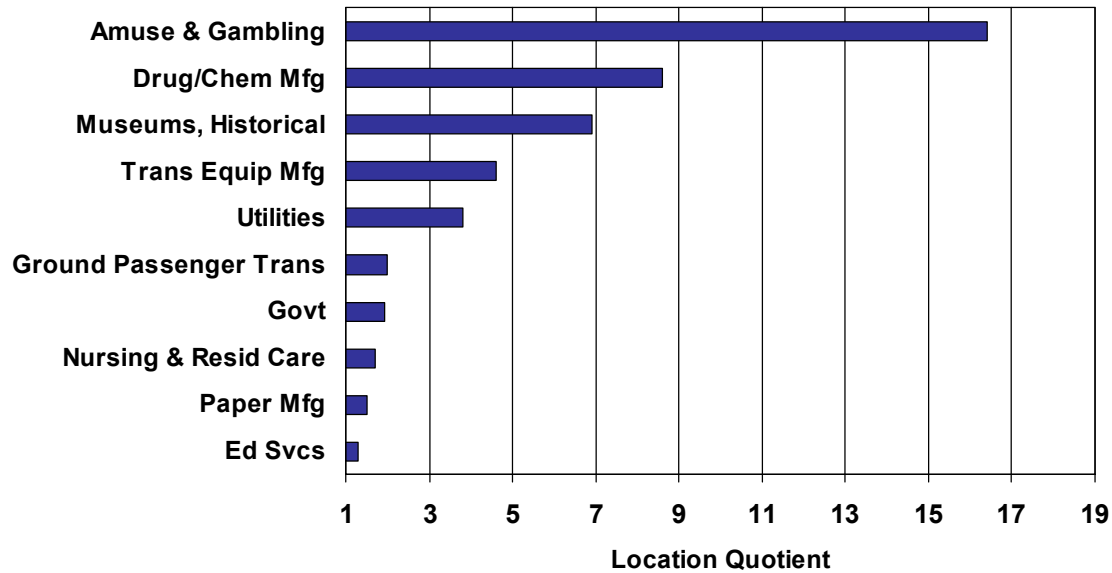
The industries that account for the largest share of employment or earnings are not necessarily the same as those that underpin growth in the local economy. The industries that are most crucial for local economic growth are those that produce goods and services sold outside the local economy, generating an inflow of income. These industries are known as the area's "economic engines" or "economic base" industries. These industries generate the income that sustains the local-serving sector of the economy—firms such as restaurants, grocery stores and automobile repair shops.

A commonly used method to identify a region's economic engines assesses the relative concentration of a given industry's employment or output relative to the same ratio in the comparison region, which in this case is the U.S. For example, by comparing the ratio of employment in the shipbuilding or pharmaceutical industry relative to total employment in the Region with the same ratio in the U.S., one develops a ratio of ratios. For example, if Transportation Equipment employment in the region represents 6.0 percent of total employment and the comparable value nationally is 1.4 percent, the region has more than four times the concentration of this industry relative to the nation ($6.0/1.4 = 4.3$). Thus, the concentration ratio, or location quotient, is a ratio of the percentage of employment in an industry in a local economy to the percentage of employment in the industry in a larger reference economy.

Figure A.9 shows the NAICS industries with the largest employment-based location quotients in SECT in 2001, relative to the U.S. It is no surprise that amusement

and gambling rise to the top, along with drug manufacturing and transportation equipment manufacturing. The presence of the casinos, Pfizer and Electric Boat all contribute to the large relative concentrations in their respective industries.

Figure A.9: Industries with Largest Relative Employment Concentrations in New London County, 2001



Source: U.S. Census, County Business Patterns
(Government Employment estimated by Economy.com)

In addition to evaluating location quotients, performing a shift-share analysis helps to determine local economic performance. This technique decomposes regional employment change into three components: a national growth effect, an industry mix effect, and a regional share effect. The sum of the three effects is the total employment change observed in the region. This analysis is used to develop a better understanding of the forces affecting local change, particularly as it relates to each industry's competitive share. If the competitive share component is positive, then the county's performance is not merely caused by national trends—a local advantage is helping the industry to succeed. Conversely, a negative regional share value suggests that there is a competitive weakness for that industry in the region.

The industries with the largest competitive employment share components in New London County between 1990 and 2002 are listed in Figure A.10. These industries are benefiting from a local competitive advantage. For instance, if we analyze NAICS 722, Food Services and Drinking Places, we notice that its national growth component is 1.01, meaning that if this industry in New London County grew at the same rate as the nation, it would have added just over 1,000 employees between 1990 and 2002. Based on the regional industry mix relative to the nation, the industry should have expected to add approximately 290 employees to its payrolls during the 1990s. However, its competitive share during this time was 3.96. This means that a local advantage in New London County enabled the industry to grow by more than 5,200.

Figure A.10: Industries with Largest Local Competitive Advantages

NAICS	Industry	New London Co Emp (1000s)		National Growth	Industry Mix	Competi- tive Share
		1990	2002			
713	Amusement Gambling, and Recreation*	0.0	21.7	0.00	0.00	21.74
722	Food Services and Drinking Places	5.2	10.4	1.01	0.29	3.96
325	Chemical Manufacturing	1.4	2.8	0.27	-0.38	1.53
611	Educational Services	0.4	1.8	0.08	0.13	1.16
621	Ambulatory Health Care Services	1.8	3.4	0.35	0.32	0.96
623	Nursing and Residential Care Facilities	1.6	3.2	0.31	0.47	0.89
622	Hospitals	1.3	2.5	0.25	0.22	0.81
811	Repair and Maintenance	0.3	1.0	0.06	0.02	0.59
812	Personal and Laundry Services	0.8	1.5	0.15	0.00	0.57
561	Administrative and Support Services	1.5	3.3	0.30	0.86	0.56

* Employment adjusted to include casinos.

Source: Economy.com and Bureau of Labor Statistics

Industry Clusters

The competitive interaction among local firms within an industry group for ideas, labor resources, and markets can provide the region with a dynamic economic concentration of firms in a region, or an Industry Cluster. The value to the region of strong industry clusters has been well documented in the industry cluster literature. Clusters often result from local economic characteristics that can include natural resources, specific local labor force skill sets, knowledge specialized in the financial sector, access to markets for either inputs or outputs or other unique local factors.

One can gain an understanding of the structure of an industry cluster through an examination of the regional purchases of goods for inputs and sales of goods to other the industries, that is the regional buyer and supplier relationships. Such an understanding can encourage and guide an economic policy that will allow the regions clusters and thus its economy to thrive.

The SECT region has identified five industry groups or clusters that are important to the regional economy. They include

- Agriculture related industries,
- the bio-science and chemicals industry,
- defense related industry,
- maritime related industries and
- tourism industries.

Figure A.11 shows an estimate of share of the overall economy that these industry clusters account for.

Figure A.11: Total Non-Duplicative SECT Industry Cluster Activity, 2001

	Total Regional Economy	Total for Five Clusters	Percent of Regional Total
Industry Sales (\$mill)*	\$19,311	\$8,266	43%
Value Added	\$13,029	\$5,718	44%
Employment	183,592	52,851	29%
Employee Compensation (\$mil)	\$6,690	\$2,119	32%
Indirect Business Tax (\$mil)	\$705	\$215	30%
Proprietor and other Income (\$ mil)	\$5,634	\$3,384	60%
Gross Inputs (\$mil)	\$5,699	\$2,055	36%
Regional Inputs (\$mil)	\$2,171	\$709	33%

Source: IMPLAN Input/output model, 2001.

* Casino Sales Estimated at \$2.0 billion

For regional industry clusters to be competitive nationally and internationally they need, among other things, ready access to key inputs. These inputs cover the full range of needs from consistent energy sources to high quality material inputs to specialized professional services to marketing. A regional input/output model can allow researchers to look at the industry linkages (the inputs and outputs from one industry to another) within an economy, and to use this data to estimate regional impacts from changes to the economy. By using this type of model to study clusters, an analyst can identify some of the important linkages among the industries within the economy. Important linkages can be observed between the clusters or from an industry that provides a good or service to a number of the clusters. As a result this type of model can be invaluable for regional industry analysis. The following analysis will look at the SECT industry clusters using the IMPLAN Input/Output Model for the region.

Figure A.12 Cluster Output and Employment, 2001¹

	Cluster Sales		Cluster Employment	
	Total (\$ Mil)	Percent of SECT	Total	Percent of SECT
Agriculture	\$172	1.1%	2,623	1.6%
BioScience	2,655	16.6%	5,163	3.2%
Defense	1,602	10.0%	16,755	10.3%
Maritime	1,109	6.9%	7,404	4.6%
Tourism*	3,758	23.5%	28,202	17.3%

Source: IMPLAN Input/output model, 2001.

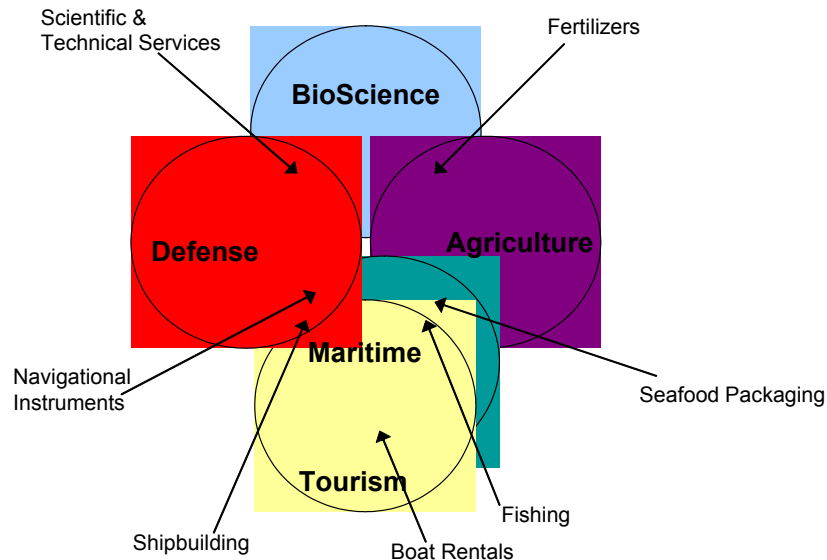
* Casino Sales Estimated at \$2.0 billion

¹ (The total values shown in Figure A.11 are adjusted to avoid the double counting that could occur using such an analysis. The data in Figure A.12 which shows the economic activity by cluster allows for the data from an industry to be for each cluster that industry is in. Thus, values in A.12 cannot be summed to the correct regional totals shown in Figure A.11.)

The output and employment data for the specific clusters are shown in Figure A.12. This Figure also shows the percent of the total economy in the SECT region. The industries in the Tourism Cluster, which includes the Casinos and their estimated \$2 billion in sales, accounts for an estimated 23 percent of the total sales in the region and 17 percent of the region's total employment. The Bioscience Cluster accounts for 19 percent of the region's total sales but only 5 percent of the region's employment.

It is important to note that an economy is a complex system and seldom do industry clusters exist as discrete silos in the regional economy. Thus, when examining the SECT industry clusters it is not surprising to find that some industries are included in more than one cluster. Figure A.13 conceptually presents some of the potential crossover industries. For example the output from and employment in the shipbuilding industry is included in both Defense and Maritime clusters.

Figure A.13 Industries within a Region Serve Multiple Clusters



It is also important to note that for some industries their activities cannot legitimately be completely included within a cluster. For example, some companies within the wholesale trade industry are completely dedicated to the agriculture industry but the data from the wholesale trade industry is not broken out in detail in the IMPLAN model. As a result a percent of these selected industries is estimated to reflect the share of the economic activity dedicated to the specific clusters.

Agriculture Cluster

The component industry drivers in the Agriculture Cluster are shown below in Figure A.14. This figure shows that overall the Agriculture Cluster had sales of around \$171 million in 2001, employed more than 2,500 and paid nearly \$44 million in wages and salaries.

Figure A.14 SECT Region Industry profile for the Agriculture Cluster

Industry Code	Description	Sales (\$ mil)	Employment	Employment Compensation (\$ mil)
	Total	\$171.7	2,623	\$43.70
6	Greenhouse and nursery production	\$54.3	486	\$22.17
12	Poultry and egg production	\$33.5	222	\$5.03
11	Cattle ranching and farming	\$17.0	682	\$4.02
390	Wholesale trade	\$16.3	120	\$5.99
10	All other crop farming	\$16.2	352	\$1.67
14	Logging	\$10.0	148	\$0.26
87	Wineries	\$7.0	29	\$0.49
13	Animal production, except cattle and poultry and eggs	\$6.4	251	\$1.78
16	Fishing	\$2.5	122	\$0.31
3	Vegetable and melon farming	\$2.4	29	\$0.55
18	Agriculture and forestry support activities	\$2.0	128	\$0.56
5	Fruit farming	\$1.8	23	\$0.62
158	Fertilizer, mixing only, manufacturing	\$1.0	3	\$0.04
	Other Industries	\$0.8	13	\$0.1

Source: IMPLAN, 2001.

The estimated annual regional purchases by the industries in the agriculture cluster are shown in Figure A.15. This cluster purchases inputs of more than \$22 million annually from businesses in the local economy. These inputs account for 32 percent of the total annual inputs used in production of the Agriculture Cluster in the SECT region. For example, the regional agriculture cluster purchases \$1.67 billion annually from manufacturing firms in the region. This represents 6.3 percent of this cluster's annual purchases of manufactured goods.

Figure A.15 Estimated Regional Purchases by the Agriculture Cluster, 2001

NAICS Code	Supplying Industries (NAICS)	Regional Purchases	Regional Purchases share of Total Purchases
TOT	TOTAL ALL INDUSTRIES	\$22,202,510	32.3%
11	Agriculture, Forestry, Fishing & Hunting	5,872,521	50.0%
22	Utilities	1,192,286	86.5%
23	Construction	415,351	100.0%
31-33	Manufacturing	1,671,532	6.3%
42	Wholesale Trade	3,668,733	40.8%
44-45	Retail Trade	659,882	91.7%
48-49	Transportation & Warehousing	1,868,433	46.5%
51	Information	1,005,566	43.5%
52	Finance & Insurance	582,175	30.0%
53	Real Estate & Rental & Leasing	1,251,407	44.2%
54	Professional, Scientific, & Technical Services	1,456,418	55.0%
55	Management of Companies & Enterprises	122,141	10.0%
56	Administrative & Support & Waste Management	610,470	61.3%
	Other	1,825,597	63.6%

Source: IMPLAN Input/Output Data Matrices, 2001.

Bioscience and Chemical Industry Cluster

The industries in the Bioscience cluster in the SECT region had an estimated \$3 billion in sales in 2001. Figure A.16 shows the sales, employment and employee compensation for the major industries.

Figure A.16 SECT Region Industry Profile for Industries in the Bioscience Cluster

Industry Code	Description	Sales (\$ mil)	Employment	Employment Compensation (\$ mil)
	Total	\$2,654.8	5,163	\$561.45
160	Pharmaceutical and medicine manufacturing	\$2,575.8	4,863	\$546.02
152	Plastics material and resin manufacturing	\$37.4	57	\$3.70
390	Wholesale trade	\$16.3	120	\$5.99
375	Surgical and medical instrument manufacturing	\$14.2	69	\$3.61
376	Surgical appliance and supplies manufacturing	\$10.2	50	\$2.08
	Other Industries	\$1.0	3	\$0.04

Source: IMPLAN, 2001.

Figure A.17 shows these estimated purchases by industry. The SECT Bioscience cluster purchased an estimated \$473 million from local companies in the SECT region in 2001.

Figure A.17 Estimated Regional Purchases by the Bioscience Cluster, 2001

NAICS Code	Supplying Industries (NAICS)	Regional Inputs	Regional Purchases share of Total Purchases
TOT	TOTAL ALL INDUSTRIES	\$476,550,564	38.1%
11	Agriculture, Forestry, Fishing & Hunting	4,198,003	70.0%
21	Mining	540	0.3%
22	Utilities	12,606,945	85.9%
23	Construction	5,381,912	100.0%
31-33	Manufacturing	235,245,910	50.0%
42	Wholesale Trade	58,597,787	40.8%
44-45	Retail Trade	3,170,420	91.7%
48-49	Transportation & Warehousing	10,773,417	26.0%
51	Information	24,648,086	42.1%
52	Finance & Insurance	8,128,182	33.9%
53	Real Estate & Rental & Leasing	14,978,974	6.6%
54	Professional, Scientific, & Technical Services	47,821,596	51.8%
55	Management of Companies & Enterprises	9,814,981	10.0%
56	Administrative & Support & Waste Management	9,033,636	66.1%
61	Educational Services	7,369,083	63.2%
71	Arts, Entertainment, & Recreation	2,074,789	65.8%
72	Accommodation & Food Services	6,368,133	62.8%
81	Other Services (except Public Administration)	13,582,883	66.7%
Misc	Government & Other	2,755,287	78.7%

Source: IMPLAN Input/Output Data Matrices, 2001.

Annually, the bioscience cluster purchases more than \$250 million in inputs from manufacturing, and also depends heavily on wholesale trade and the professional, scientific, and technical service industry group.

Defense Cluster

Figure A.18 shows the major industries in the Defense cluster and their total sales, employment and employee compensation. These Industries had sales greater than \$1.5 billion and 16,750 employees.

Figure A.18 SECT Industry Profile for Industries in the Defense Cluster, 2001

Industry Code	Description	Sales (\$ mil)	Employment	Employment Compensation (\$ mil)
	Total	\$1,601.8	16,755	\$973.64
357	Ship building and repairing	\$985.0	6,888	\$453.83
505	Federal Military	\$593.4	9,722	\$505.95
506	Federal Non-Military	\$12.5	106	\$10.65
352	Aircraft engine and engine parts manufacturing	\$10.4	36	\$3.14
353	Other Industries Including (aircraft parts & equipment)	\$0.5	3	\$0.07

Source: IMPLAN, 2001.

Figure A.19 shows the distribution of the \$95 million in regional purchases of the defense cluster in the SECT region. Overall, the SECT region received \$2.03 billion in defense contracts in 2001. This cluster also includes the employees and activities from the U.S. Naval Submarine base in Groton.

Figure A.19 Estimated Regional Purchases by the Defense Cluster, 2001

NAICS Code	Supplying Industries (NAICS)	Regional Inputs	Regional Purchases share of Total Purchases
TOT	TOTAL ALL INDUSTRIES	\$95,252,721	18.9%
22	Utilities	6,039,798	87.5%
23	Construction	2,350,940	100.0%
31-33	Manufacturing	16,223,293	5.2%
42	Wholesale Trade	14,198,167	40.8%
48-49	Transportation & Warehousing	7,497,931	40.1%
51	Information	2,275,695	30.9%
52	Finance & Insurance	4,215,874	35.2%
53	Real Estate & Rental & Leasing	4,522,704	12.5%
54	Professional, Scientific, & Technical Services	18,234,010	56.3%
55	Management of Companies & Enterprises	1,586,389	10.0%
56	Administrative & Support & Waste Management	5,029,211	70.7%
72	Accommodation & Food Services	2,518,157	64.4%
	Other	10,560,551	67.1%

Source: IMPLAN Input/Output Data Matrices, 2001.

Maritime Cluster

Figure A.20 shows the major industries in the Maritime Cluster. These industries, led by the shipbuilding and repairing, had sales slightly greater than \$1.1 billion and directly employed nearly 7,500 in 2001. This is the same shipbuilding industry shown above in the analysis of the defense cluster. This illustrates the problem of industries being represented in more than one clusters.

Figure A.20 SECT Region Industry Profile for the Maritime Cluster, 2001

Industry Code	Description	Sales (\$ mil)	Employment	Employment Compensation (\$ mil)
	Total	\$1,108.6	7,404	\$475.11
357	Ship building and repairing	\$985.0	6,888	\$453.83
393	Water transportation	\$93.6	151	\$9.98
390	Wholesale trade	\$16.3	120	\$5.99
401	Motor vehicle and parts dealers	\$9.5	114	\$4.60
16	Fishing	\$2.5	122	\$0.31
434	Machinery and equipment rental and leasing	\$1.1	3	\$0.12
358	Other Industries including Boat building	\$0.7	5	\$0.27

Source: IMPLAN, 2001.

The annual regional purchases from the Maritime Cluster are shown by major industry sector in Figure A.21.

Figure A.21: Estimated Regional Purchases by the Maritime Cluster, 2001

NAICS Code	Supplying Industries (NAICS)	Regional Inputs	Regional Purchases share of Total Purchases
TOT	TOTAL ALL INDUSTRIES	\$128,687,192	22.4%
22	Utilities	6,257,696	87.5%
23	Construction	2,660,774	100.0%
31-33	Manufacturing	16,418,430	5.1%
42	Wholesale Trade	15,140,778	40.8%
44-45	Retail Trade	1,110,840	91.7%
48-49	Transportation & Warehousing	20,129,925	54.2%
51	Information	4,190,538	35.6%
52	Finance & Insurance	5,643,358	28.4%
53	Real Estate & Rental & Leasing	6,173,518	15.4%
54	Professional, Scientific, & Technical Services	20,771,852	55.7%
55	Management of Companies & Enterprises	1,802,798	10.0%
56	Administrative & Support & Waste Management	7,823,175	67.8%
61	Educational Services	525,383	60.8%
71	Arts, Entertainment, & Recreation	705,933	72.5%
72	Accommodation & Food Services	2,971,210	65.5%
	Other	16,360,985	65.8%

Source: IMPLAN Input/Output Data Matrices, 2001.

Major inputs into the Maritime Cluster are provided by the professional, scientific and technical services sector; transportation and warehousing; manufacturing; and wholesale trade. The maritime cluster includes the activities of the U.S. Navy's Submarine Base at Groton, Maritime education and research at the UCONN Avery Point Campus, the UCONN Marine Sciences and Technology Center, the U.S. Coast Guard Academy and installations, Mystic Marine Life Aquarium, and Mystic Seaport, Cruise ship support activities including docking of the Regal Empress, Royal Cruises, and Holland America. Also included in the maritime cluster are manufacturers of maritime products including Electric Boat, sail makers, and maritime instruments. Some of the other maritime related activities include the region's marinas, fishing boats, and ferries.

Tourism Cluster

As shown in Figure A.22 the tourism cluster, led by the casinos, has total sales of more than \$3.7 billion and employs more than 28,000.

Figure A.22: SECT Industry Profiles for the Tourism Cluster, 2001

Industry Code	Description	Sales (\$ mil)	Employment	Employment Compensation (\$ mil)
	Total*	\$3,757.6	28,202	\$532.29
479	Hotels and motels, including casino hotels*	\$3,425.0	22,785	\$434.61
481	Food services and drinking places	\$70.6	1,748	\$22.84
478	Other amusement, gambling, and recreation industries	\$62.3	533	\$17.57
475	Museums, historical sites, zoos, and parks	\$40.4	526	\$16.60
480	Other accommodations	\$28.1	200	\$2.93
432	Automotive equipment rental and leasing	\$23.1	159	\$4.00
471	Performing arts companies	\$22.9	836	\$10.24
393	Water transportation	\$18.7	30	\$2.00
472	Spectator sports	\$17.3	785	\$8.96
473	Independent artists, writers, and performers	\$16.6	116	\$4.77
456	Travel arrangement and reservation services	\$11.8	200	\$3.66
474	Promoters of performing arts and sports and agents for pu	\$8.4	200	\$2.37
87	Wineries	\$7.0	29	\$0.49
391	Air transportation	\$4.9	30	\$1.20
16	Fishing	\$0.5	24	\$0.06

Source: IMPLAN, 2001.

* Note that Sales in the 479, Hotels ... including casinos has been adjusted, \$2,billion

Figure A.23 shows the regional purchases for the tourism cluster by major industry sector.

Figure A.23: Estimated Regional Purchases by the Tourism Cluster, 2001

NAICS Code	Supplying Industries (NAICS)	Regional Inputs	Regional Purchases share of Total Purchases
TOT	TOTAL ALL INDUSTRIES	\$87,577,827	47.8%
11	Agriculture, Forestry, Fishing & Hunting	460,119	24.2%
21	Mining	323	2.2%
22	Utilities	5,497,157	87.8%
23	Construction	3,751,262	100.0%
31-33	Manufacturing	4,029,540	13.1%
42	Wholesale Trade	3,157,467	40.8%
44-45	Retail Trade	2,675,512	91.7%
48-49	Transportation & Warehousing	6,607,126	63.3%
51	Information	5,585,337	38.1%
52	Finance & Insurance	2,199,320	26.4%
53	Real Estate & Rental & Leasing	10,231,901	40.1%
54	Professional, Scientific, & Technical Services	6,406,799	51.8%
55	Management of Companies & Enterprises	375,256	10.0%
56	Administrative & Support & Waste Management	8,508,011	64.2%
61	Educational Services	8,677,440	57.7%
62	Health Care & Social Assistance	12,252	88.4%
71	Arts, Entertainment, & Recreation	8,909,244	78.0%
72	Accommodation & Food Services	1,781,299	67.8%
81	Other Services (except Public Administration)	4,292,841	66.1%
Misc	Government & Other	4,419,620	77.4%

Source: IMPLAN Input/Output Data Matrices, 2001.

* Note that Sales in the 479, Hotels ... including casinos has been adjusted, \$2,billion

An additional component of the tourism cluster, not reflected in these figures, is that there were more than 5,600 homes in the SECT region, based on the 2000 Census, classified as seasonal, recreational or occasional use—basically vacation homes. This represents 5.6 percent of the total housing stock in the SECT region. Old Lyme, Salem, Lebanon, East Lyme, Lyme, and Voluntown all had more than 10 percent of their housing stock classified as seasonal. Assuming that these vacation homes are occupied 75 percent of the time between Memorial Day and Labor Day, one can estimate that there are more than 54,000 occupancy-weeks and each occupancy-week has an estimated rental cost of \$1,000 as well as estimated weekly local expenditures for food, gas, and entertainment and related purchases of \$400. The total direct economic impact of vacation homes and summer rentals to the region would be more than \$75 million annually.

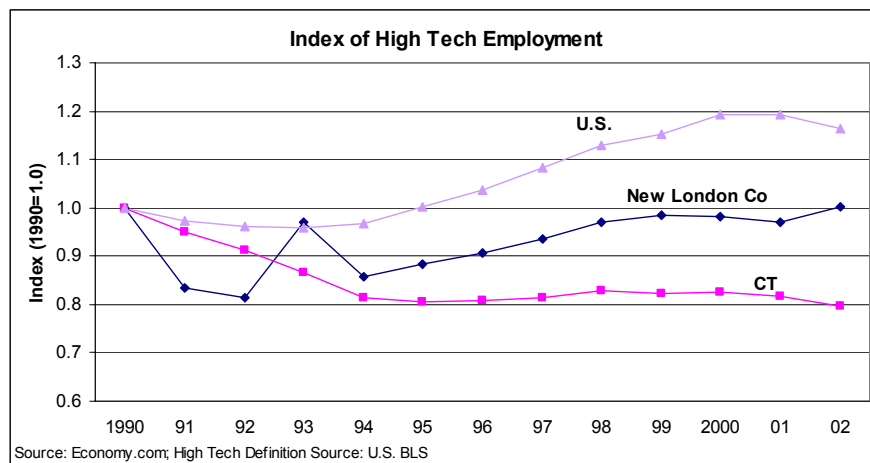
Technology Employment

Total technology employment in SECT totals an estimated 5,600, with almost half falling in the pharmaceuticals industry.

Although shipbuilding does not appear on the official list of high tech industries, the case could reasonably be made that the science, engineering and R&D investment that takes place in the construction of a nuclear submarine is sufficient to classify it as high tech as well. Using this expanded definition of high tech, one finds that the high tech share of SECT employment ranges from 11,000 to 13,000, for an overall value of 10-12 percent high tech employment. Technology employment in this range places SECT among the top ten tech intensive states. Massachusetts, at 15.5 percent, leads all states in this area.

As Figure A.24 illustrates, tech employment growth has been non-existent in the SECT region. Although the region has done better than the state in this regard, overall they both lag the nation and the differences are growing over time.

Figure A.24: High tech employment in SECT returned to its 1990 level in 2002

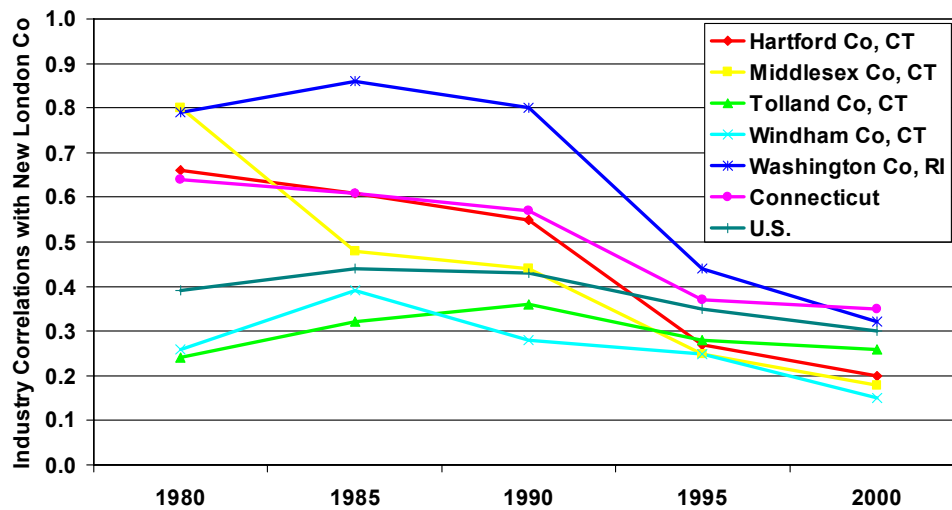


Industry Structure

Over the past couple of decades the industry mix of SECT has become increasingly dissimilar from adjacent counties, as well as with the state and nation. By comparing the relative share of every industry in each county using correlation coefficients, as charted in Figure A.25, we are able to track the degree to which industry mix is converging or diverging. It is quite evident, from this figure, that the industrial composition and growth of SECT is placing it on a growth path quite unlike its neighbors.

The county that had the greatest similarity to New London County in the past was Washington County, Rhode Island, with a correlation around 0.8 during the 1980s. However, since 1990, the two counties have become increasingly dissimilar and the coefficient has dropped to about 0.3. The story is the same with each of the other comparison regions—the differences are becoming more pronounced over time. New London County’s divergence is primarily due, in large part, to the emergence and growth of the casinos as well as its reliance on defense-related activities.

Figure A.25: New London County’s Industry Structure is Increasingly Dissimilar with Nearby Counties



Source: Economy.com

Industry Growth

In order to assess the growth prospects of SECT, we compared its industry portfolio based on the proportion of employment in three different growth categories—fast, average and slow. All 3-digit NAICS industries were classified into three groups based on their average annual growth rate, at the national level, between 1980 and 2002. “Fast growth” industries grew between 2.3 percent and 6.0 percent annually; “average growth” industries were bounded between 0.4 percent and 2.29 annually, and “slow growth” industries had average annual growth rates between -3.2 and 0.4. Industry employment in SECT was segmented based on this classification and as shown in Figure A.26, the region has a very favorable industry employment mix with nearly 60 percent of

employment in fast growth industries—nearly one-third higher than Connecticut and the U.S.

Figure A.26: Almost 60% of New London County’s Employment is in “Fast Growth” Industries

	Percent of Non-Govt Emp		
	Fast	Average	Slow
U.S.	44%	43%	13%
CT	45%	41%	13%
New London Co	59%	29%	12%

Source: Economy.com

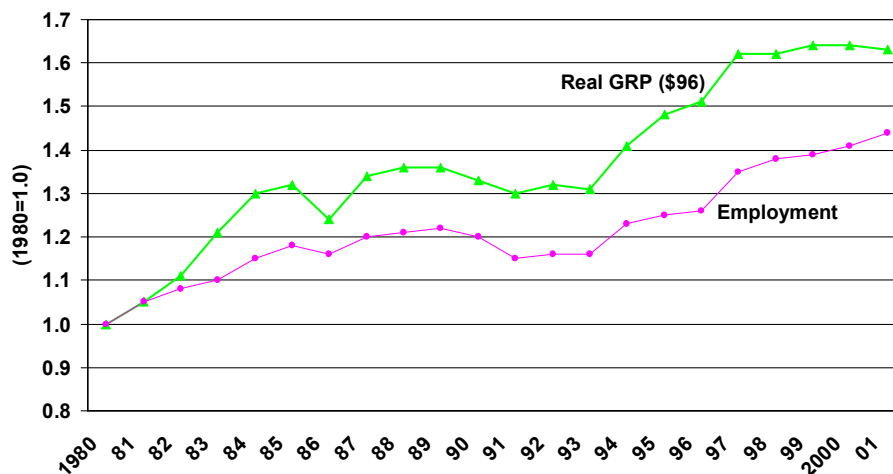
Chief among the “fast growing” industries are Amusement and Gambling Industries, Food Services and Drinking Places, Professional and Technical Services, Administrative and Support Services, Ambulatory Health Care Services, and Nursing and Residential Care Facilities.

Gross Regional Product

Although employment levels and trends are critical in understanding the vitality of regional economies, it is also necessary to examine the value-added, or gross product originating, from regional industry. A single metric, such as employment, does not always reflect an industry’s overall vitality. For instance, although manufacturing employment in Connecticut has been steadily declining for the past 20 years, real value added has continued to grow.

Figure A.27 shows that real gross regional product (GRP) in New London County has grown relatively faster than employment since the 1980s. The fastest period of growth was between 1993 and 1997, and since then GRP has held steady. The industries with the largest effect on the stagnating GRP include Transportation Equipment and State Government, because these two relatively large industries have undergone both job loss and slower rates of GRP growth during the 1990s. In addition, the Amusement industries continue to see increases in employment while its GRP grows at slower rates.

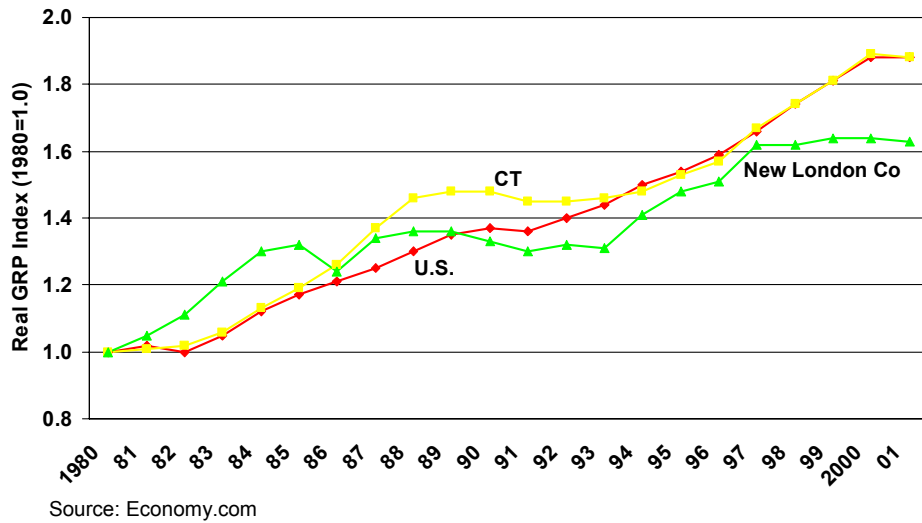
Figure A.27: New London County GRP and Employment Index of Growth



Source: Economy.com

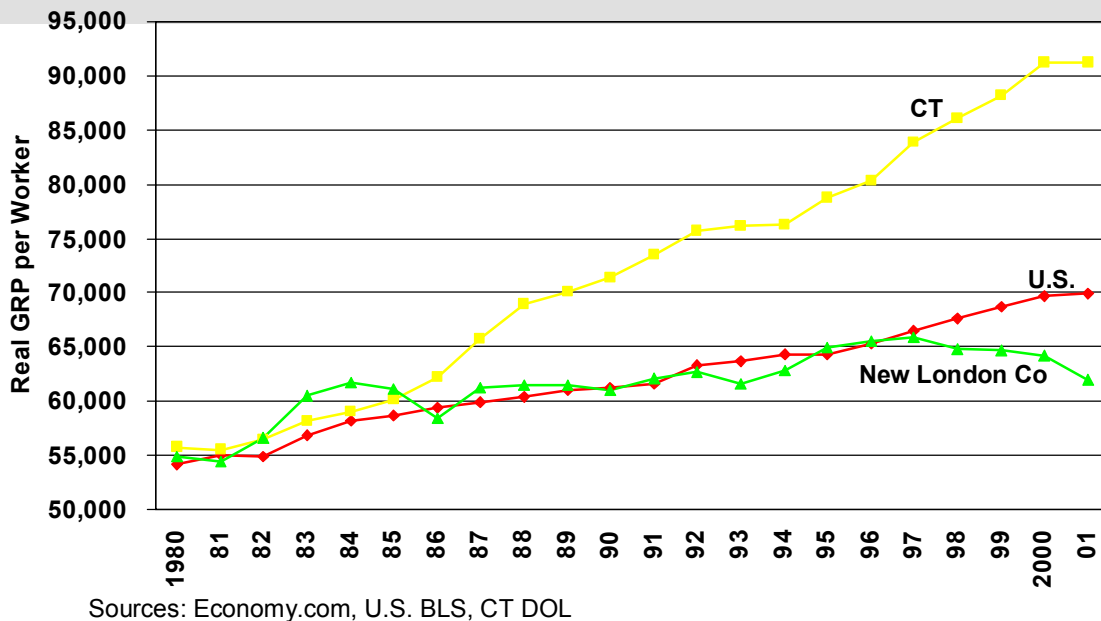
Compared to the state and nation, GRP growth has been lower in New London County through the 1990s, as shown in Figure A.28.

Figure A.28: Index of GRP Growth: New London County, CT and U.S.



In terms of real GRP per worker, New London County's trend is similar to that of the nation, while Connecticut's average continues to climb. Since 1997, however, the SECT region has seen its productivity stagnate while the national average continues to increase (Figure A.29). The Amusement industries, a major force in the County, have relatively low productivity rates, which affects the overall productivity level of New London County.

Figure A.29: Productivity Growth in New London County Tracked with the Nation Until 1997, then Slowed

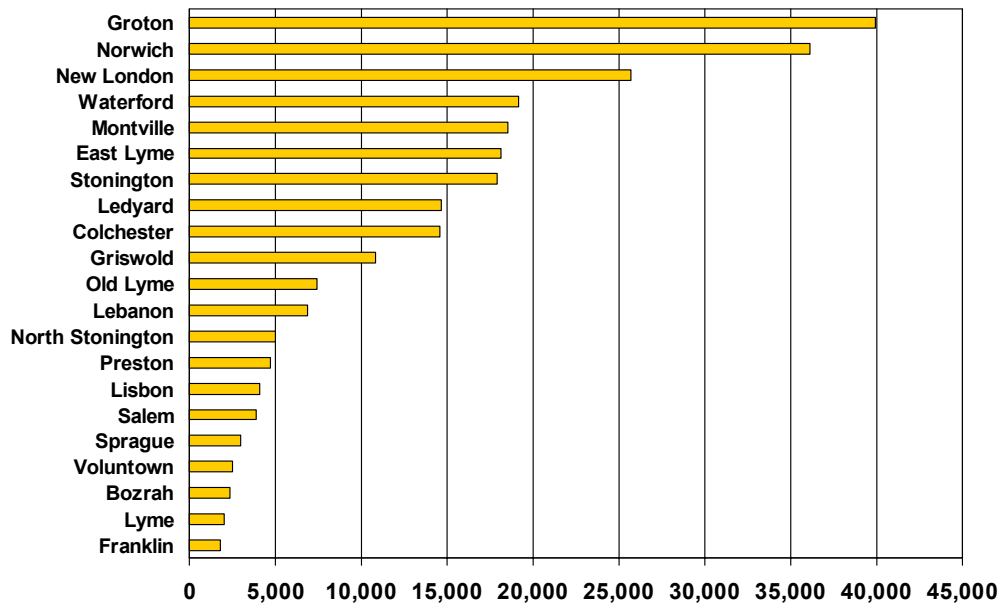


Population and Labor Force Trends

Population

The 21 towns in the Southeastern Connecticut Region (SECT) accounted for 7.6 percent of the total population in Connecticut in 2000. The distribution of the total population of 259,088 by the towns in the SECT region is shown in Figure A.30. According to the 2000 Census, Groton, Norwich, and New London together account for nearly 40 percent of the population in the SECT Region.

Figure A.30: Population by SECT Town: 2000



Source: Census Bureau

Geographically, as shown in Figure A.31, the population is primarily concentrated along the Thames River then along the coast. The seven towns with the smallest populations, Franklin, Lyme, Bozrah, Voluntown, Sprague, Salem, and Lisbon are all interior towns—each with a population of less than 5,000.

From 1900 to 2000 the total population for the SECT towns increased from 82,758 to 259,088, for an annual average growth rate of 1.15 percent, a slightly slower pace than in Connecticut. As might be expected, this nearly three fold increase in population was not distributed equally among the 21 towns.

Figure A.31: Population Distribution, 2000

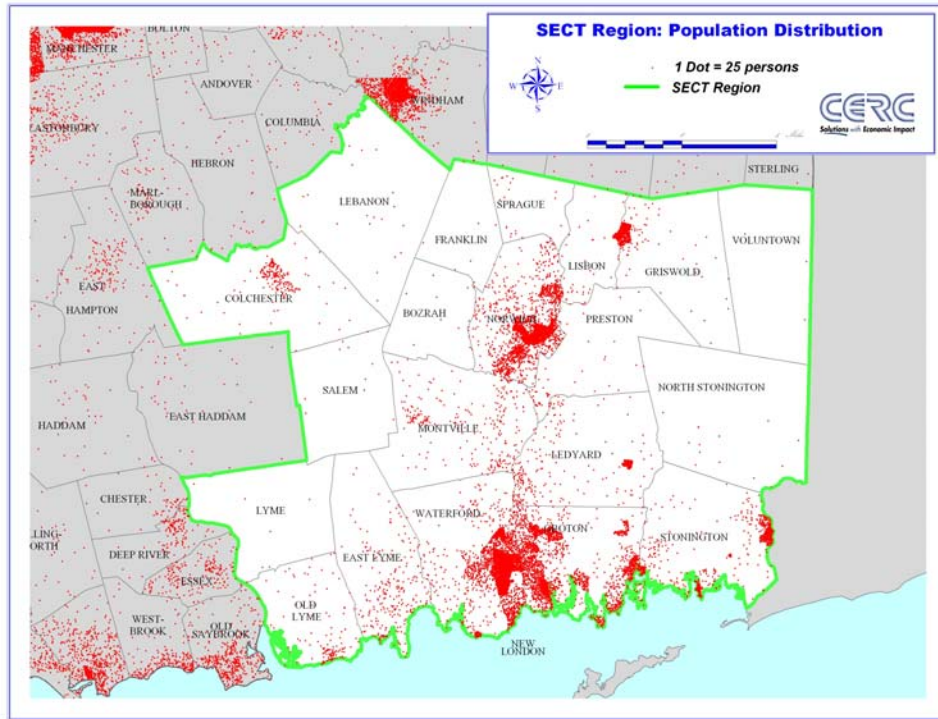
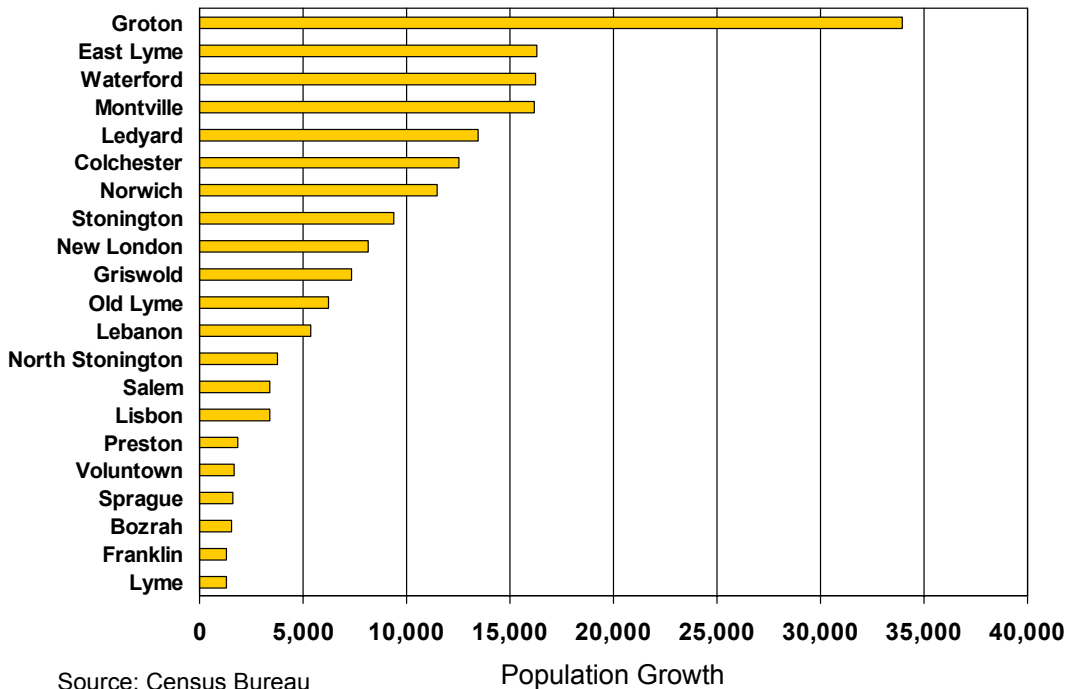


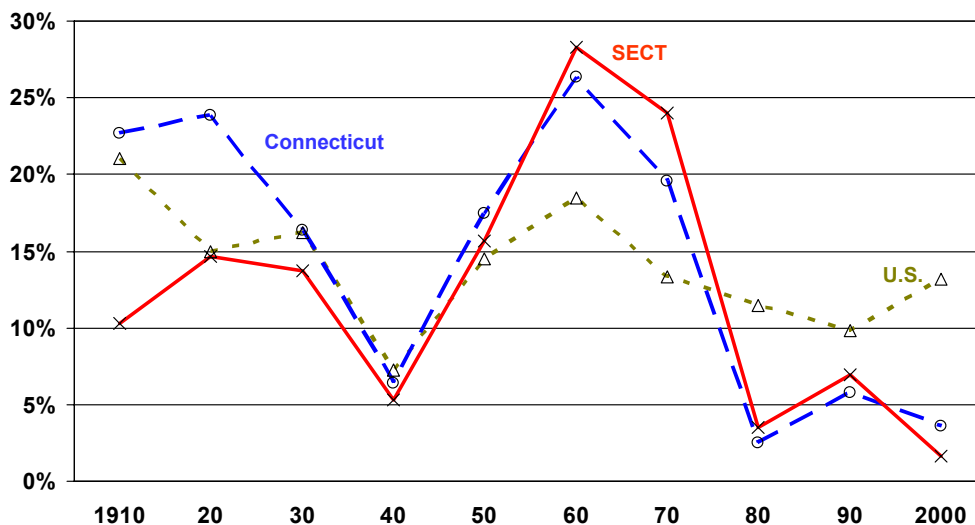
Figure A.32, which shows the population growth by town, reveals that the top five towns (Groton, East Lyme, Waterford, Montville and Ledyard) accounted for more than 50 percent of total population growth during the century.

Figure A.32: Population Growth by Town, 1900 to 2000



The largest population growth for the region occurred in mid-century, starting with a 16 percent growth from 1940 to 1950, a 28 percent growth from 1950 to 1960 and a 24 percent growth from 1960 to 1970. Thus, the thirty years between 1940 and 1970 accounted for 60 percent of SECT's population growth in the 20th century. Figure A.33 shows the percent change in population for the region and also for Connecticut and the U.S. The rapid increase in population observed from 1940 to 1970 in the SECT towns is closely mirrored with the population increases for Connecticut, and both show much higher growth rates than the U.S. during that period. However, in each decade since 1970, the population growth in the U.S. has been from 3 and 11 percent higher than SECT's.

Figure A.33: Percent Population Change, 1900 to 2000

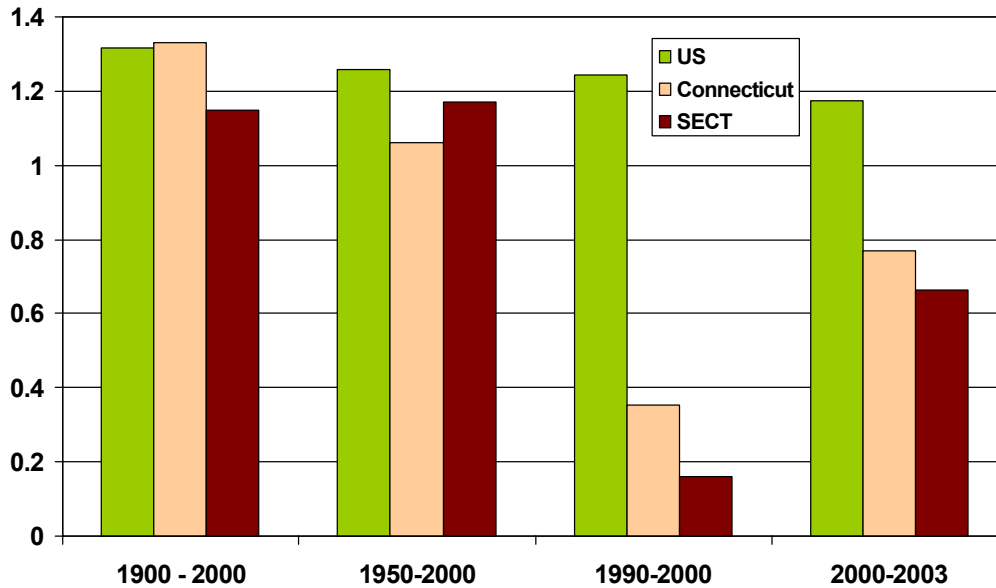


Source: Census Bureau

Regional population trends are closely associated with job opportunities, and the high growth observed through the 1950s, '60s and '70s largely reflect the economic expansion occurring in the region during that time. The employment trends and economic factors are examined in detail elsewhere in this report. For now, it is important to note that the region's demographic trends and characteristics are largely a result of the region's economic opportunities which were influenced by outside factors, including the defense industry during the cold war.

The annual average population growth rate for the region, state and nation are shown in Figure A.34. Each bar is based on the region's population growth using a measure that allows for comparing differing lengths of time. Between 1900 and 2000 the U.S. Population grew at 1.32 percent, Connecticut's population grew at 1.33 percent and SECT's population grew at 1.15 percent. In the 1990s, while the U.S. population still continued to grow at slightly more than 1.2 percent per year, the populations of Connecticut and SECT grew only slightly.

Figure A.34: Annual Average Growth Rates, 2000 Base

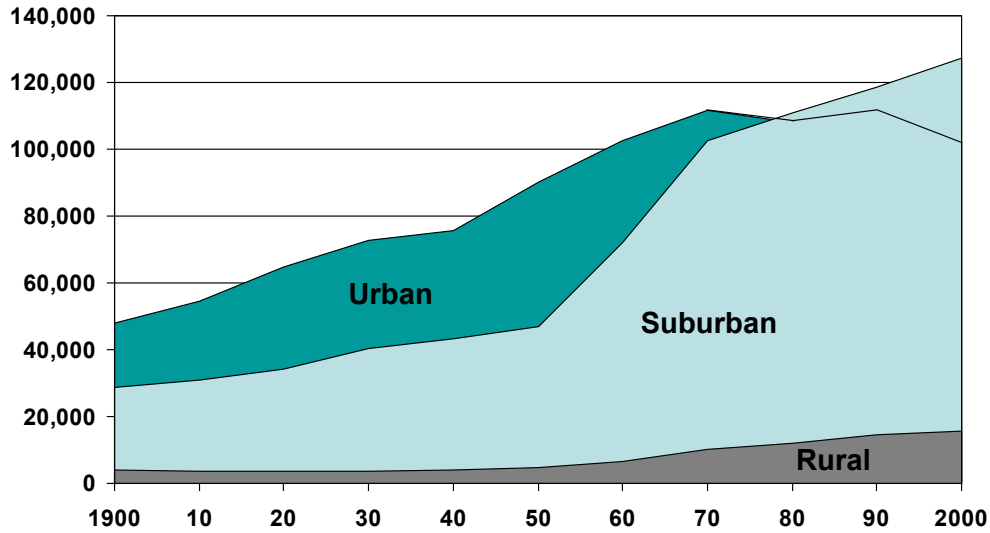


Source: Census Bureau 1900 to 2000. CERC DataFinder, 2003

The final three bars show the estimated annual average population growth from 2000 to 2003. These estimates suggest that the populations of both SECT and Connecticut have been growing more rapidly recently. In fact, the estimated growth for the towns in SECT between 2000 and 2003 (5,200) already exceeds the growth observed in that region throughout the 1990s (4,130).

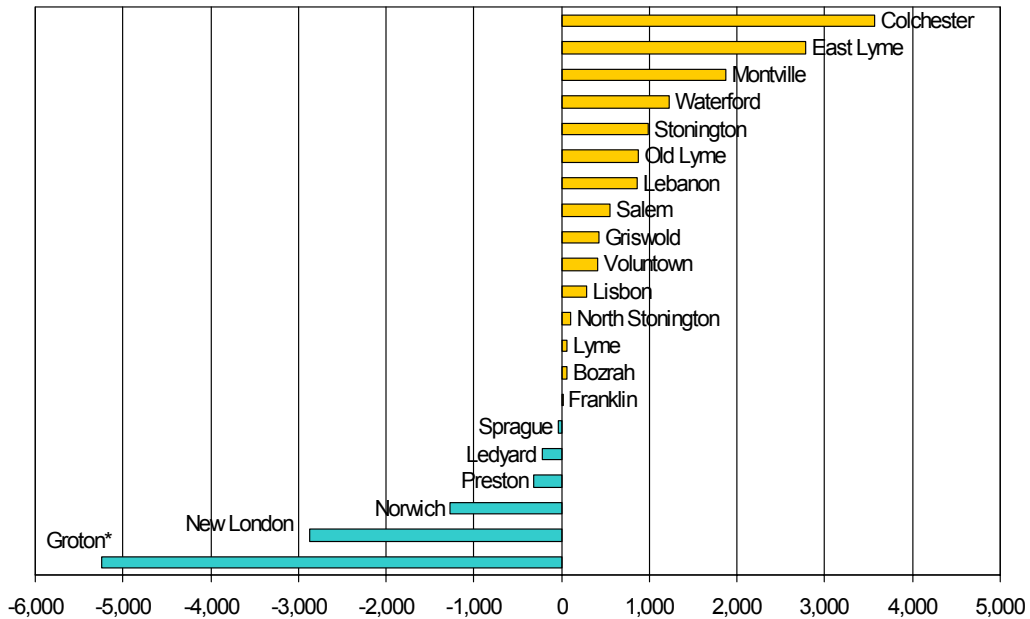
From 1900 to 2000 the population in the thirteen suburban towns in the SECT region grew by an annual average of 1.5 percent resulting in an increase of 444 percent. The population in five rural towns grew at an annual average rate of 1.4 percent (397 percent increase). The population growth in the three urban towns of Groton, New London and Norwich averaged a growth rate of 0.75 percent during the century resulting in a 211 percent increase. Figure A.35 shows the trends in the population levels for the urban, suburban and rural towns in the SECT region from 1900 to 2000. This figure shows that the urban towns had faster growth than the suburban towns from 1940 to 1950 but since 1950 the population growth in the suburban towns has exceeded that of the urban towns. The annual average growth in the urban population from 1940 to 1970 in the SECT region was 1.3 percent, while the annual growth in the suburban sectors from 1950 to 1970 was 2.9 percent. Since 1970 the population in the three urban towns has declined at an annual average rate of -0.31 percent while the population in the suburban towns continued to grow, although at the more moderate pace of 0.73 percent.

Figure A.35: Urban, Suburban and Rural Population Growth in SECT during the 20th Century



Source: Census Bureau

Figure A.36: Change in Population, 1990 to 2000



Source: Census Bureau

*Groton's municipal officials contest the 2000 Census estimate.

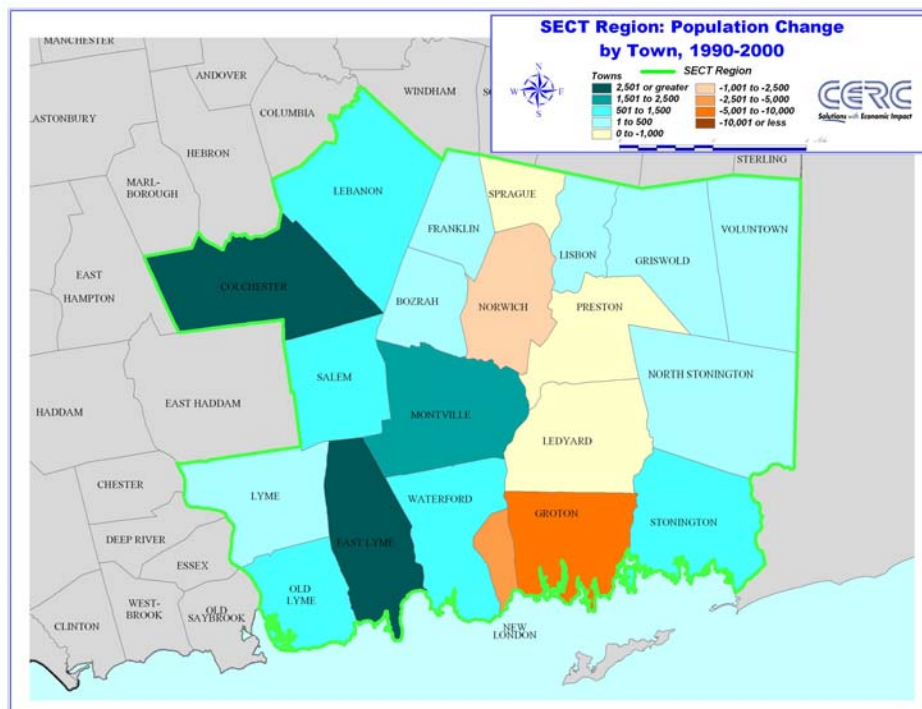
Recent Population Trends

Figure A.36 shows the change in population by town from 1990 to 2000. During the 1990s 15 of the SECT towns gained nearly 14,100 people while six of the towns lost 9,960. Out of the six towns that lost nearly 9,960 people between 1990 and 2000, Groton and New London, the bigger more urban towns, lost 80 percent of that total.

However, between 2000 and 2003 Groton and New London gained back slightly more than 1,100. Among the other towns, the difference in the population trends between 1990 and 2000, and 2000 and 2003 are minimal.

The data in Figure A.37 suggest that the towns with larger populations have experienced a significantly different history from the smaller towns. Historically, the population of New London peaked in 1960 at 34,182, while Norwich's population peaked in 1970 at 41,739 and Groton's in 1990 at 45,144. This trend of population moving out of the larger older cities has been observed throughout the Northeast and has resulted in the hollowing out of many of the urban centers. This loss of population in the urban centers is shown in Figure A.37 which reveals the geographic distribution by town of the changes in the population throughout the SECT region. The higher population growth has tended to be in the more rural areas while the population losses have been in the more urban centers. It should be observed that while there are some positive aspects of this trend primarily related to the quality of life of those who settle in the more rural areas, this trend increases congestion on the roadways, tends to concentrate poverty in the inner cities and reduce the open space in the more rural regions.

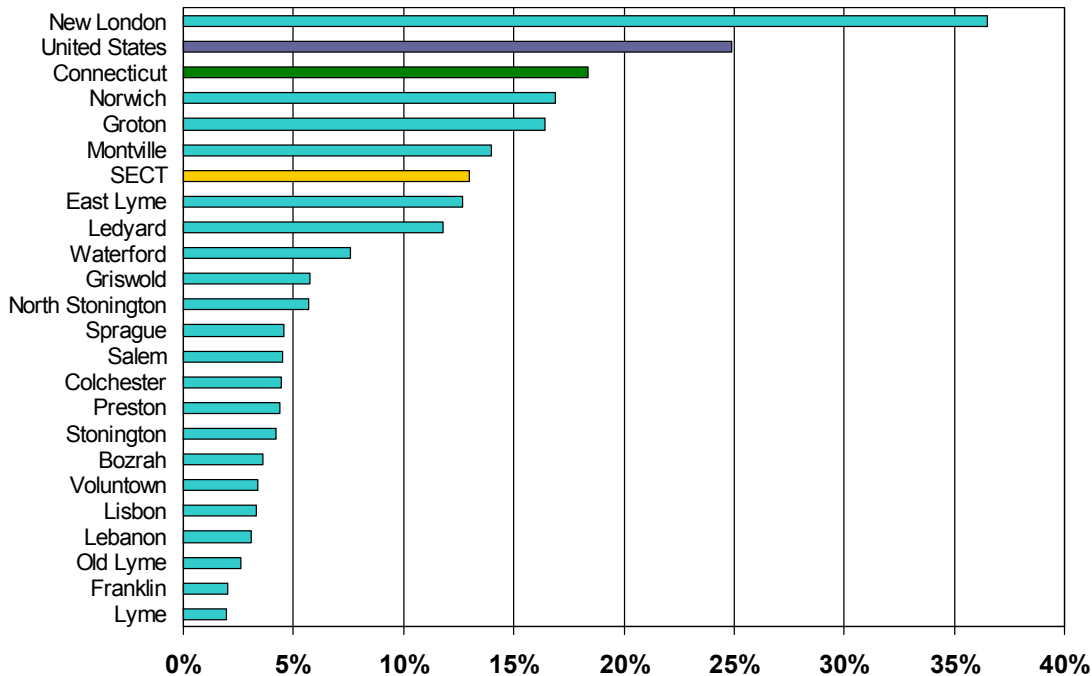
Figure A.37: Map of Population change by Town, 1990 to 2000



The urban centers tend to be significantly different from their more rural neighbors in a number of demographic measures. One important factor is the diversity of the populations. Populations with different levels of racial/ethnic diversities have different needs and challenges.

Overall the population in the Region is not very racially diverse. Only one town, New London is more diverse than either the U.S. or Connecticut. As Figure A.38 shows, New London's non-white population at 36.5 percent of the total population is nearly 12 percentage points higher than the U.S. and 18.1 percentage points higher than Connecticut. Thirteen percent of SECT's population is non-white and if New London were not included it would be only 10 percent non-white. Twelve of the 21 towns have non-white populations that account for five percent or less of their total populations.

Figure A.38: Percent Non-White Population



Source: Census Bureau

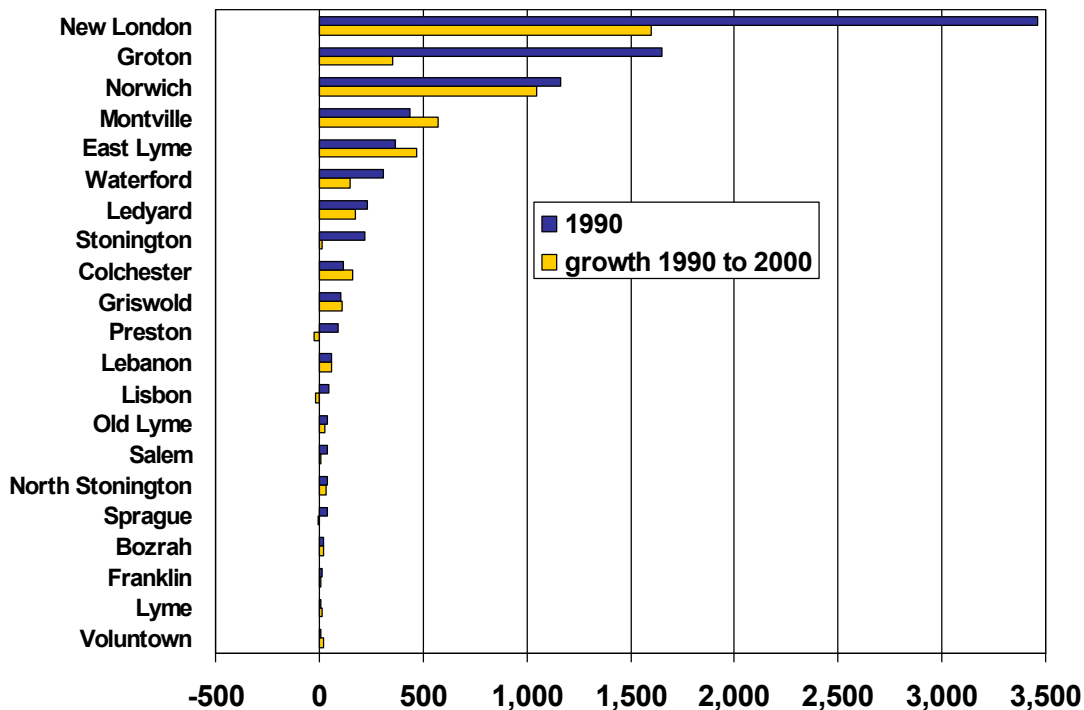
Non-white population Share

Of the non-white population, about 40 percent is black, 15 percent is Asian, seven percent is American Indian, and 14 percent is some other single race. Finally, nearly 21 percent of the non-white population in the SECT region considered themselves to be of more than one race. In Colchester, East Lyme, Groton, Montville, New London, and Norwich the highest non-white share of the population is black. In Ledyard and North Stonington, the highest non-white share is American Indian. In Lyme, Old Lyme, Preston, Salem, and Waterford the highest non-white share is Asian. In Bozrah, Franklin, Griswold, Lebanon, Lisbon, Sprague, Stonington, and Voluntown the highest non-white share is from more than one race. The ethnic changes from 1990 to 2000 cannot be clearly determined because of changes in the Census long form. In addition, the demographic distributions by race discussed above do not address the distribution of the Hispanic population because the Hispanic population can be classified as any race in the Census forms.

The Hispanic population of the SECT region grew by 57 percent during the 1990s. While this is a significant growth rate and higher than any other race or ethnic

group, the growth in the Hispanic population for the U.S. during the 1990s was 58 percent. In addition, because the Hispanic population in SECT in 1990 was fairly small, the 57 percent increase represented only about 4,800 people and represented only 5.1 percent of the total population in 2000. In the U.S. Hispanics represented about 12.5 percent of the total population in 2000. Connecticut, in contrast, was 9.4 percent. Figure A.39 shows the total Hispanic population in the SECT Towns in 1990 and the absolute growth in the Hispanic populations between 1990 and 2000. Except for Groton, which had a relatively small increase in the Hispanic population, the towns with larger Hispanic populations had larger increases in that population between 1990 and 2000.

Figure A.39: Hispanic Population, Total 1990 and Growth 1990 to 2000



Source: Census Bureau

Another factor that defines the demographic composition of a region is the share of the population that is born outside of the U.S. For towns in the SECT region, the shares range from 2 percent to 10 percent. As shown in Figure A.40, nearly 5.5 percent of SECT's population is foreign born, compared to nearly 11 percent for all of Connecticut and slightly more than 11 percent for the U.S. (not shown)

Figure A.40: Foreign Born Share of the Population, 2000

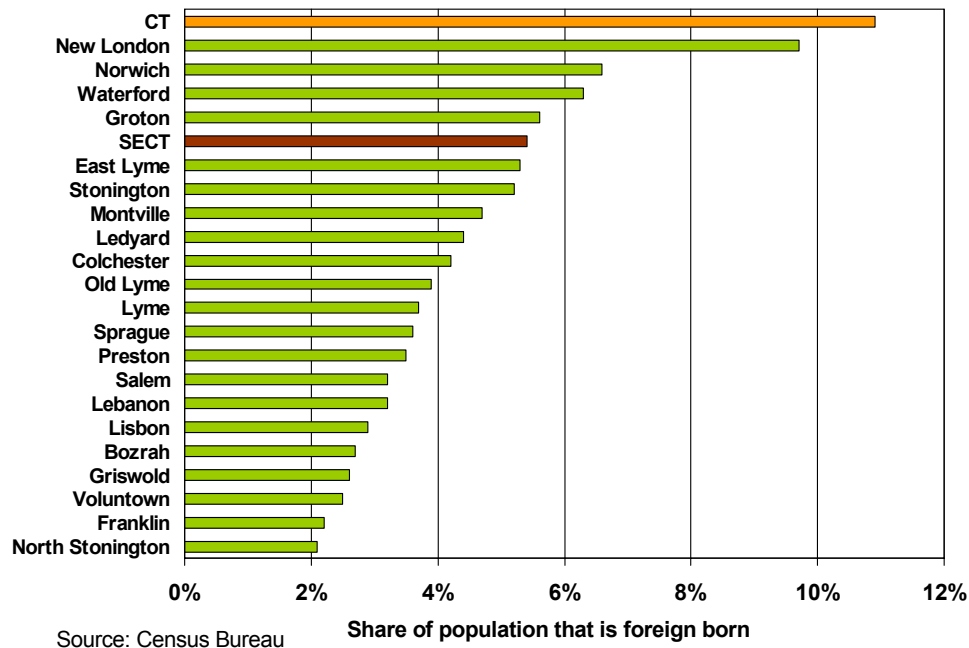
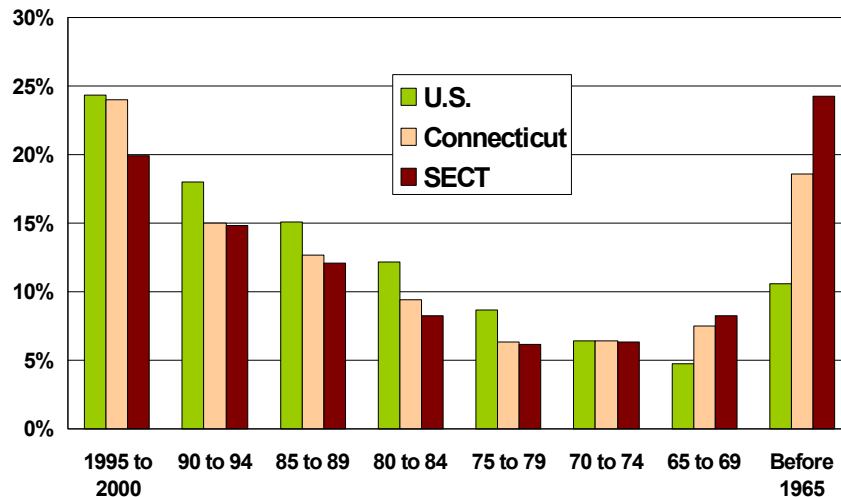


Figure A.41 shows that a larger percentage of the foreign born population in the SECT region came into the area prior to 1965 than either the populations of the U.S. or Connecticut.

Figure A.41: Year of Entry of Foreign Born Population, 2000

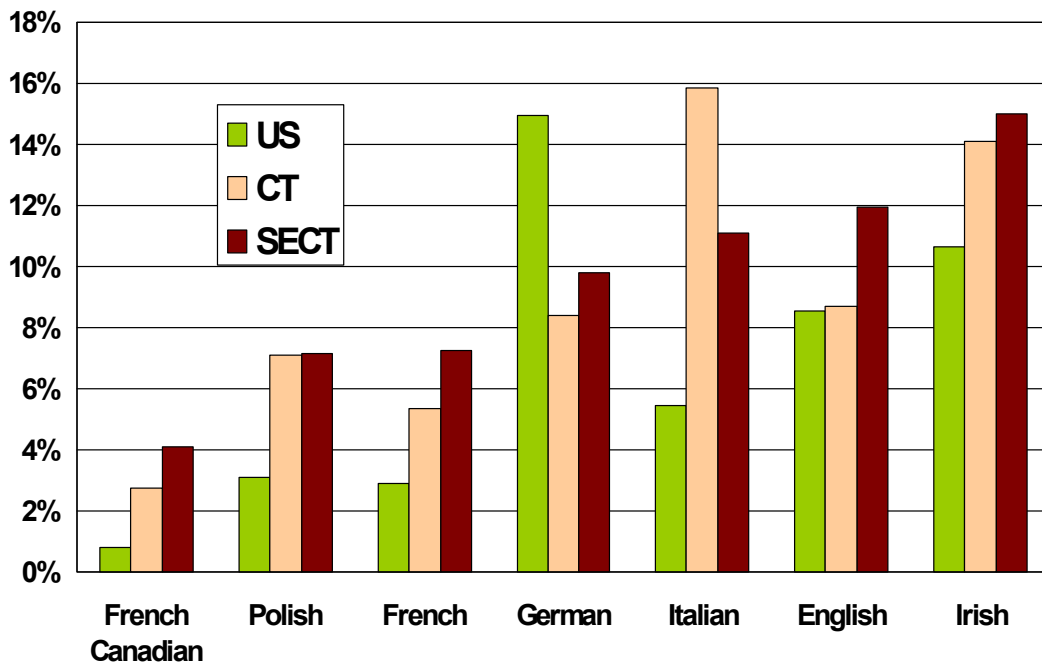


This observation appears to be strongly related to the more rural nature of the region. The smaller towns in the region have relatively larger shares of their foreign born populations entering the U.S. prior to 1965 while the larger towns of New London and Groton have higher shares of relatively recent entries. New London and Groton have 42

and 53 percent respectively of their foreign born populations entering the U.S. since 1994. Thus, although the populations within SECT are relatively homogeneous in some ways, the larger towns tend to have unique aspects in their demographic profiles that need to be considered in regional development projects.

The distribution of the population by major ancestry group is shown in Figure A.42. Although the SECT region is generally comparable to Connecticut, it has a lower share of its population with Italian ancestry and higher shares of nearly all the other major groups seen in Connecticut.

Figure A.42: Distribution of Population by Ancestry, 2000

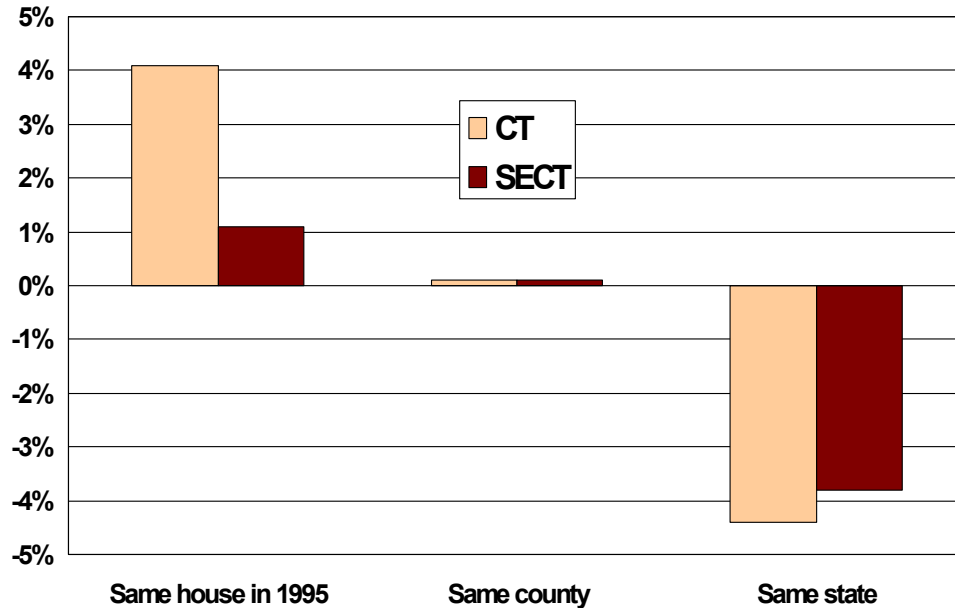


Source: Census Bureau

The migration patterns observed between 1995 and 2000 and shown in Figure A.43 suggest that SECT has a slightly higher share of the population that stayed in the same house between 1995 and 2000 than the U.S. population, but nearly three percent less than that observed for Connecticut. With basically 25 percent of the populations of the U.S., Connecticut, and SECT remaining in the same county between 1995 and 2000 this figure shows only a very slight difference in Connecticut and SECT from the U.S. Finally, while 9.6 percent of the population in the U.S. was in the same state in 2000, as in 1995, Figure A.43 shows that the region had 3.8 percent fewer people within the same state and Connecticut had 4.4 percent fewer people stay within the state. In summary these data suggest that people in Connecticut, and to some extent in the SECT region, tend to stay in the same house longer than in the U.S. However, if they had moved between 1995 and 2000 then they were more likely to have moved in from out of state than was generally observed for the U.S. population. This may in part be due to the presence of the naval base and training facility in Groton---IRS migration data show that

there is a continuous flow of tax filers, presumably military personnel, between New London County and San Diego, Bremerton, Washington and other areas with naval bases.

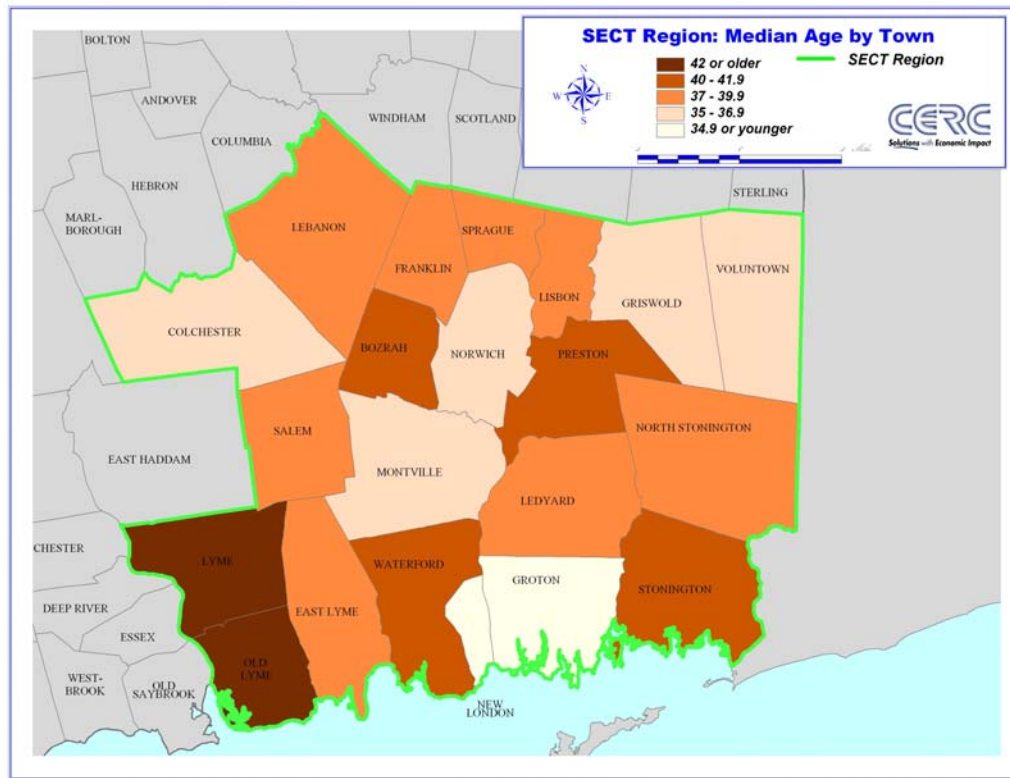
Figure A.43: Migration Overview: Difference from the U.S. Population, 2000



Source: Census Bureau

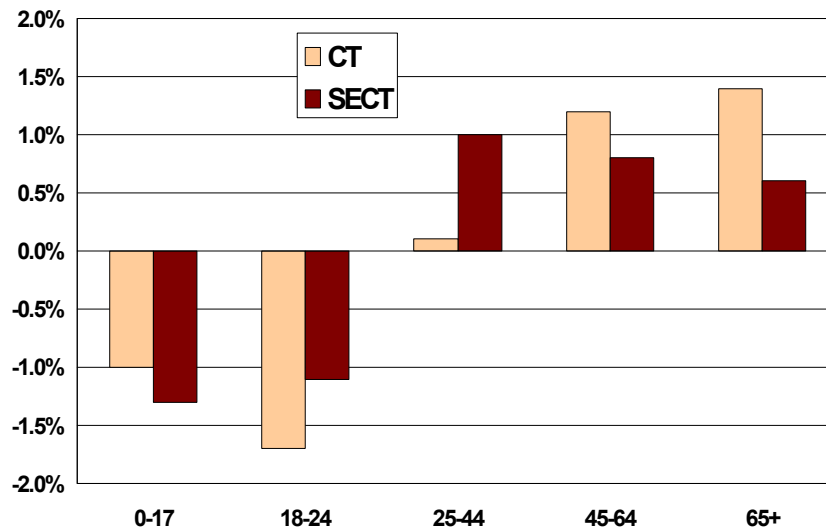
The median age for the SECT population is 37.0, slightly younger than Connecticut's 37.4 and older by slightly more than two years than the U.S. Figure A.44 shows the median age for each of the towns in the SECT region. New London and Groton with median ages of 31.2 and 32.5 are the only two towns in the region with populations significantly lower than the regional average. As might be expected these are also the towns with the largest populations. Lyme with a median age of 47.1 has the population with the oldest median age. Old Lyme, Waterford, Stonington, Preston, and Bozrah all have populations with median ages older than 40.

Figure A.44: Median Age of Population by Town, 2000



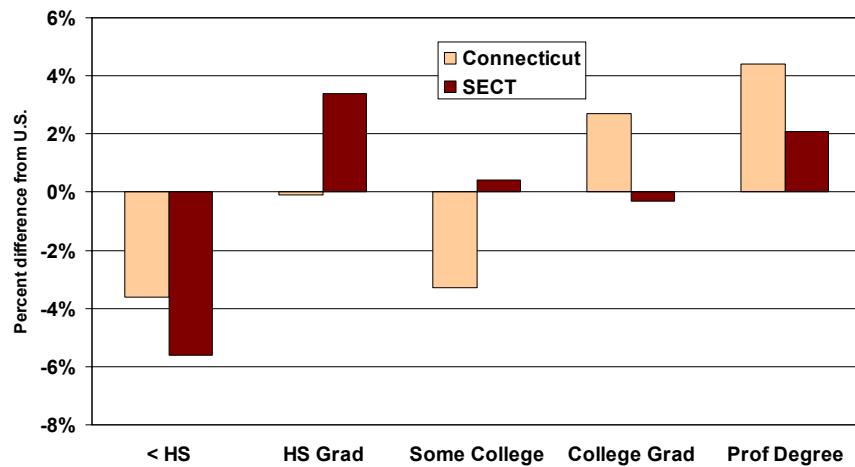
As shown in Figure A.45, the difference in the percent distribution of the population among the age cohorts tends to be within a percentage point of the U.S. SECT's population distribution at 24.4 percent is about 1.25 percentage points less than the U.S. in the 0 to 17 age group. In the 18 to 24 age cohort, SECT's share of the total population that is in the 18 to 24 age cohort is only about one percentage point below the U.S., while Connecticut overall with 8 percent of the total population in this cohort, is 1.7 percentage points below the U.S.

Figure A.45: Age Cohorts, Percentage point Difference from U.S.



The relatively smaller share of the populations for SECT and Connecticut in the below 24 age cohorts are compensated for in the older age cohorts. SECT's greatest share above the U.S. is in the 25 to 44 age cohort, while Connecticut overall has the highest difference from the U.S. in the 65 plus cohort. The relative concentration of the SECT region's population in 25 to 44 age cohort may reflect the presence of the submarine base. In general, the 25 to 44 age group is considered by some to represent the 'innovating population', a highly productive cohort responsible for most of the technological innovation in the country. Thus, the age distribution in the SECT region suggests that SECT has the potential for a highly productive workforce.

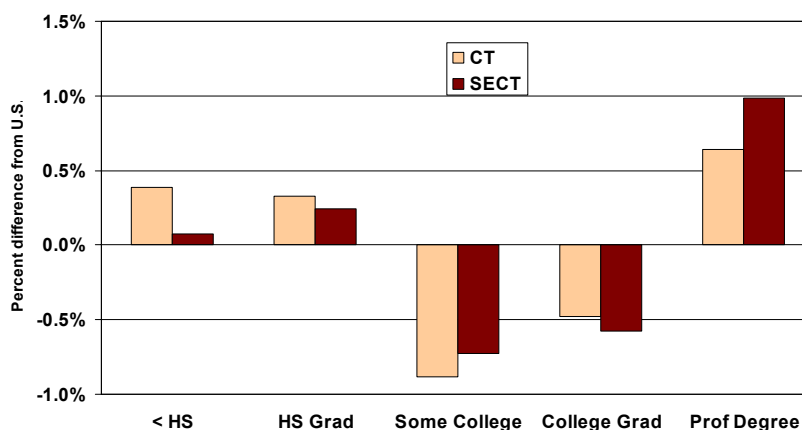
Figure A.46: Difference from U.S. in Educational Attainment, 2000



Source: U.S. Census. All data based on population 25 or older.

Education is another factor that contributes to a productive workforce. Figure A.46 shows the state and regional differences from the U.S. educational attainment profile. Connecticut overall has a very high level of educational attainment. Although the SECT region generally reflects Connecticut's population in educational attainment, the region has a smaller share of population (14 percent) without at least a high school degree than Connecticut (16 percent) or the U.S. (19.6 percent). The share of SECT's population with some college and the share with only a college degree are comparable to the U.S. but distinct from Connecticut's distribution with a concentration in the college degree cohort. The share of SECT's population with an advanced degree is slightly more than two percent above the U.S. but more than two percentage points below Connecticut's.

Figure A.47: Difference from U.S. in Change in Educational Attainment Cohorts, 1990-2000



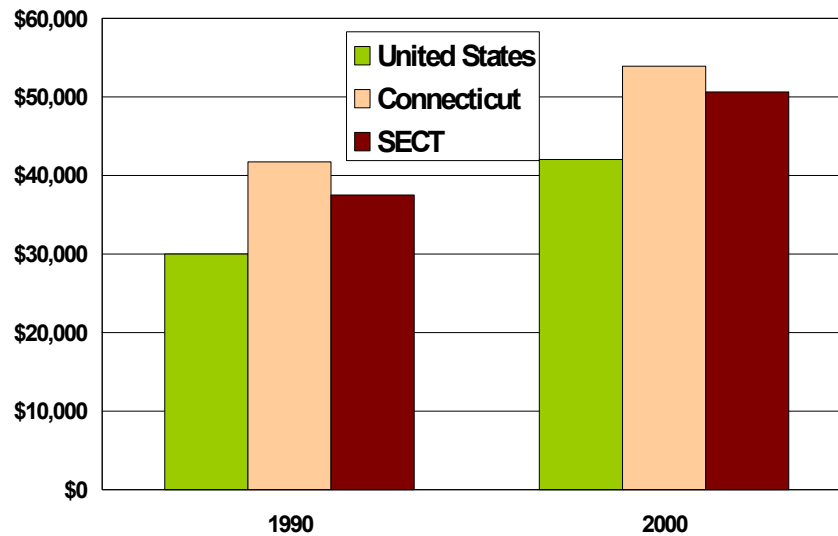
Source: U.S. Census. All data based on population 25 or older.

The differences in the change in the educational attainment of the populations of SECT and Connecticut from the U.S. are shown in Figure A.47. The segment of the population without a high school degree for the U.S. decreased more than either Connecticut or SECT. Between 1990 and 2000 the population cohort without a high school diploma decreased from 24.8 percent to 19.6 percent (5.2 percentage points) in the U.S., while in Connecticut, that share decreased 4.8 percentage points from 20.8 to 16.0 percent. SECT's already relatively low share of the total population without at least a high school diploma, 19.1 percent, decreased nearly as much as the U.S. to 14.0 percent. The 0.1 percentage point difference that SECT is above the U.S. measure is shown in Figure A.47. The most obvious difference for SECT and Connecticut is the change in the share of the population in educational attainment in the most educated section. Those with advanced degrees in Connecticut increased one percentage point more in SECT than in the U.S. and slightly more than a half of a percentage point in Connecticut than in the U.S.

In summary, the educational attainment measures indicate that SECT's population has a better level of basic education than either Connecticut or the U.S. In addition, the educational attainment of SECT's population seems in many ways to have improved during the 1990s more than the U.S. or Connecticut with further decline in those without high school degrees, and increases greater than the U.S. or Connecticut in the share of those with advanced degrees. However, Connecticut overall has a more highly educated population than SECT with 31.5 percent having at least a college degree in Connecticut while SECT has only a 26.2 percent.

Higher educational attainment levels in the region should be expected to have a positive influence on the regional income. Figure A.48 shows that the median household income in the SECT region was slightly more than \$50,600, about \$8,600 higher than the U.S. but about \$3,300 less than Connecticut in 2000.

Figure A.48: Median Household Income, 1990 and 2000

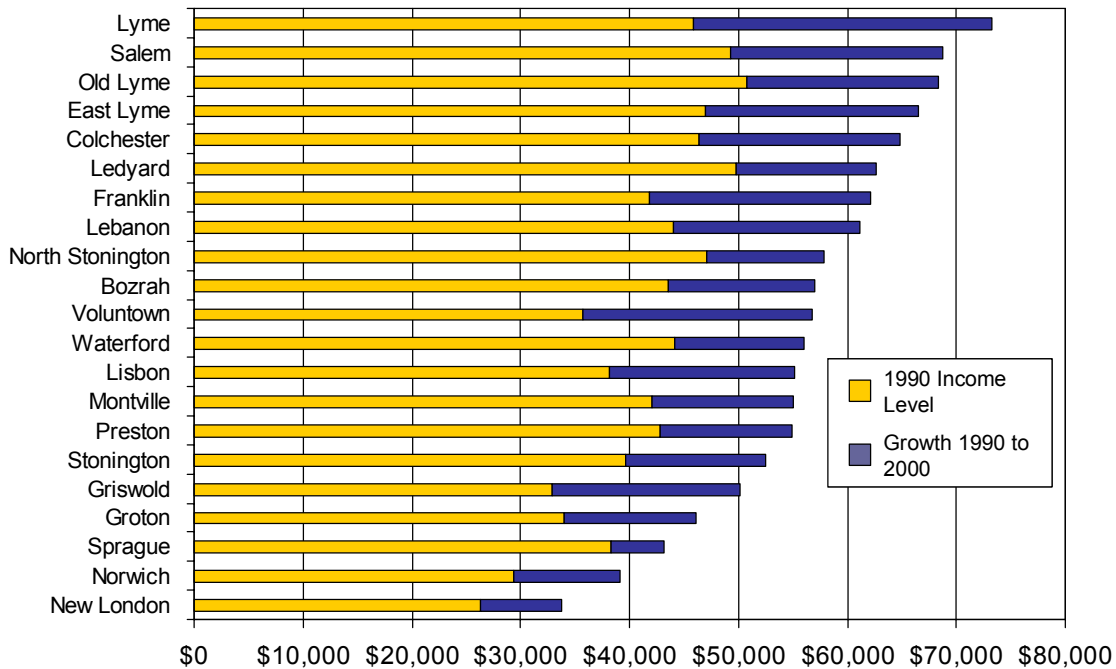


Source: Census Bureau

Between 1990 and 2000 the median household income in the SECT region increased nearly \$13,200 while the U.S. increased by nearly \$12,000 and Connecticut increased by \$12,200. In percentage gains, the U.S. grew by nearly 40 percent, 11 percent more than Connecticut and five percent more than the SECT region (in part because it started with a smaller value and yet had significant growth.) Thus, when looking at the median income data the median household incomes of these larger regions converged during the 1990s.

However, when examining the median incomes for the individual towns in the SECT region, the towns with higher incomes in 1990 had higher growth than the towns with lower incomes. In general, across the towns in the region, a town with a median income \$1,000 higher than another town in 1989 had an increase in median income \$300 higher than the town with the lower income. Although there is quite a bit of variation in this trend, Figure A.49 does show that the towns with higher incomes in 1989 (the longer inner bars that are lighter-yellow) tended to have higher income growth (the darker blue bars) than the towns with lower incomes. Specifically, Figure A.49 shows that the median incomes for the towns with the lowest values in 1990, New London and Norwalk, fell further behind the other towns. The differential between the town with the lowest median income, New London (in both 1990 and 2000) to the town with the highest median income, (Old Lyme in 1990 and Lyme in 2000) increased from 193 percent to 217 percent between 1990 and 2000. New London's income increased only \$7,500 while Lyme had the highest increase of nearly \$27,500.

Figure A.49: Median Income 1990 and Growth 1990 to 2000



Source: Census Bureau

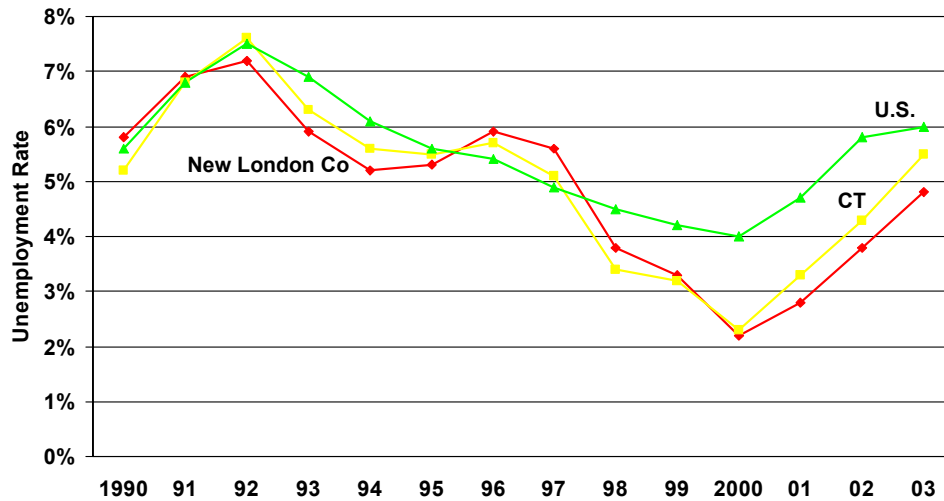
Thus, the changes in the distribution of wealth in the region did not lead to convergence in the median household incomes by town especially for the towns with the lowest median household incomes in 1990. At the other end of the spectrum the towns of Lyme, Voluntown, Franklin, East Lyme and Salem that had some of the largest increases in median household incomes are all rural towns with relatively small populations. It should be noted that the shifts in income reflect both the changes in income of residents who were in each town and residents who moved into the town during the decade.

In summary, the demographic measures for the towns in the SECT region suggest the more rural towns in the region have had faster population growth than the urban towns. The urban towns have more diverse populations although New London, the third most populous town in the SECT region has the highest shares of the population that are non-white, that are foreign born, and that are Hispanic. In addition, New London's demographics suggest that the city is challenged by lower median incomes and higher poverty rates than any of the other towns in the region. The other towns in the SECT region appear to be endowed with fairly highly educated and established populations. Recent population changes (1990 to 2000) on the negative side in Groton, New London, and Norwich as well as on the positive side for Colchester, East Lyme, and Montville challenge each of these communities' resources in very different but important ways.

Labor Force

Labor force data measures employment based on place of residence. As a result it is a measure that can show economic distress in an area, as well as a potential labor supply in a region. Figure A.50 shows the unemployment rate (total resident labor force divided by the number of residents unemployed) for New London County, Connecticut and the United States. New London County has tracked closely with the state trend, with slightly lower recent unemployment rates in 2001 and 2002.

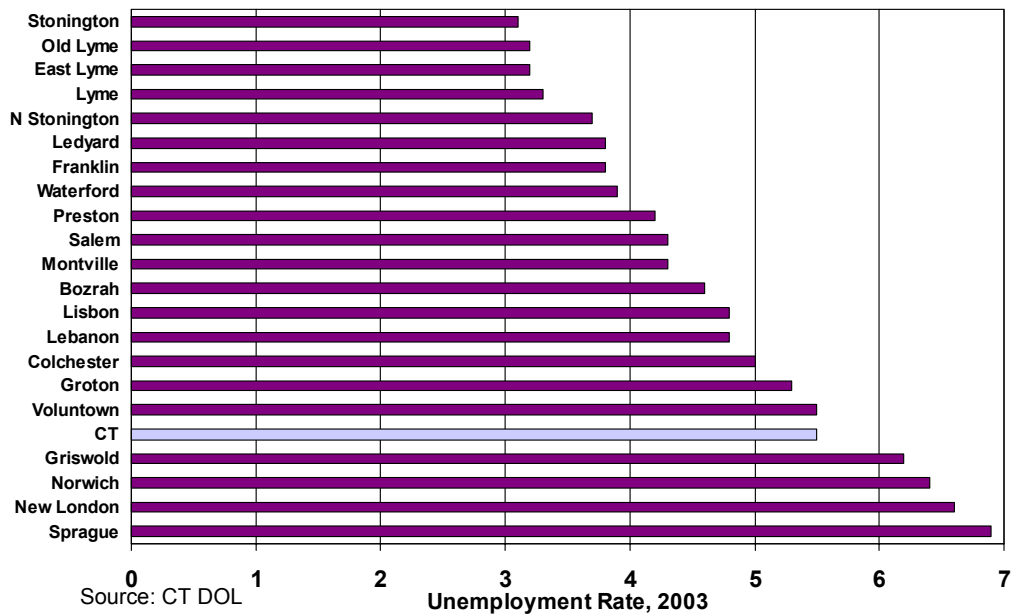
Figure A.50: The Unemployment Rate of New London County Has Tracked Closely With the State through the 1990s



Sources: CT DOL, U.S. BLS

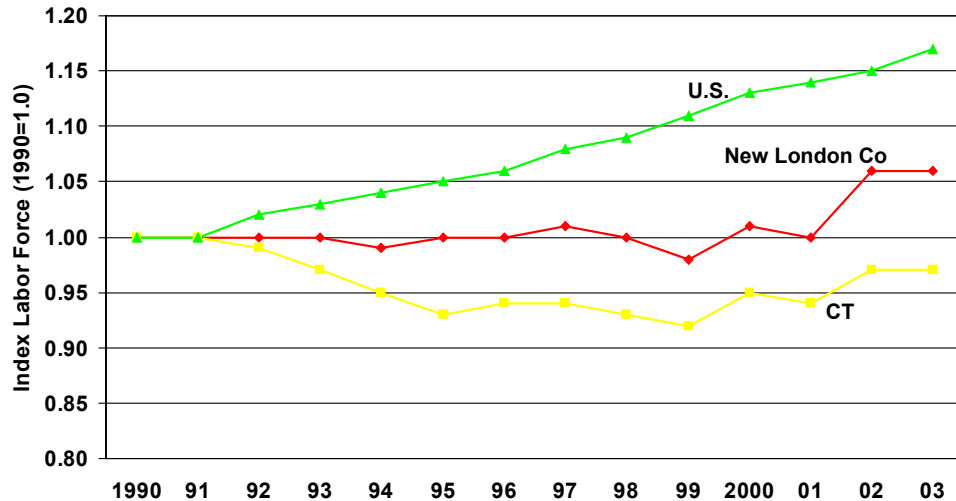
Of the 21 towns in the SECT region, five had unemployment rates greater than the state averages in 2002, as seen in Figure A.51.

Figure A.51: Unemployment Rates by SECT Town, 2002



As seen in Figure A.52, the labor force in New London County did not decrease like the state in the early to mid-1990s, but overall the growth patterns are similar. Both the county and state grew slower than the nation.

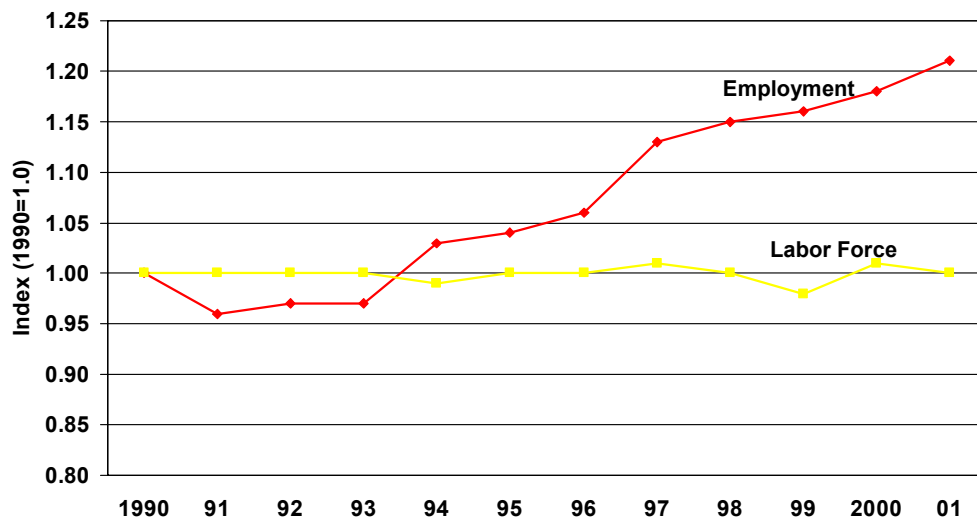
Figure A.52: Index of Labor Force Growth: New London County, Connecticut, U.S.



Sources: CT DOL, U.S. BLS

When comparing employment and labor force growth rates, one notices that employment in the region increased dramatically compared to the labor force. This means that more residents from outside the region are working in the region (Figure A.53).

Figure A.53: Employment and Labor Force Growth in New London County



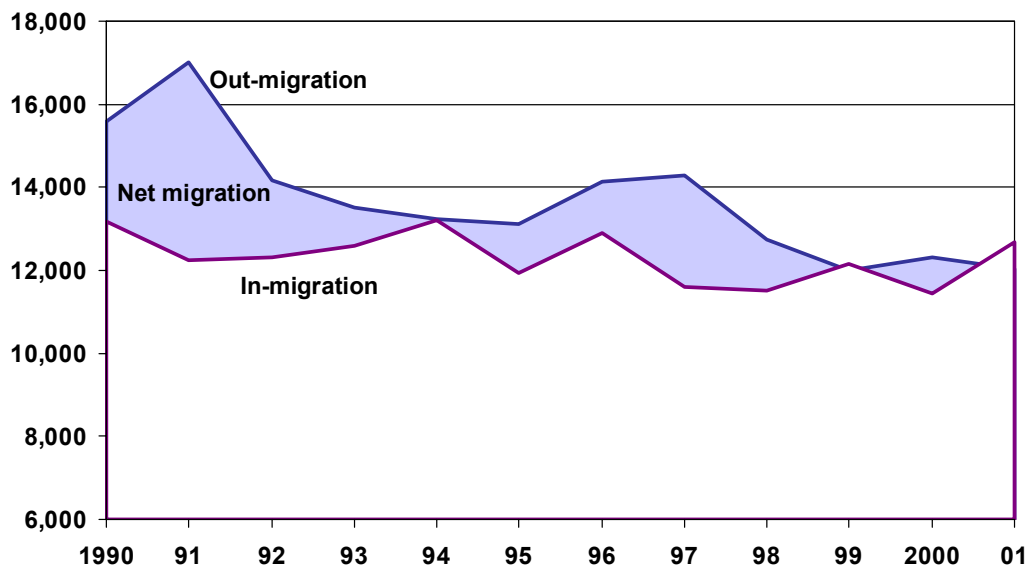
Source: CT DOL

Note: Nonfarm Employment Not Available for New London County After 2001

Migration

The labor force of a region is composed of residents aged 16 to 65 who are either employed or looking for work. However, during periods of sluggish growth, some people quit looking for work and drop out of the regional labor force. Some of these residents will migrate out of the region to find work in other regions. People can also migrate into the region if they perceive they can improve their quality of life. Figure A.54 shows net migration (IRS returns), the difference between out-migration and in-migration for New London County between 1990 and 2001. Figure A.54 suggests that the stability in the labor force shown in Figure 4.4 was maintained, in part, by in-migration and out-migration during the period. Figure A.54 also shows a general decreased in out-migration through the decade resulting in slight positive net migrations in 1998 to 1999 and 2000 to 2001.

Figure A.54: Net Migration Decreased During the 1990s in New London County



Source: IRS, Statistics of Income

Growth in U.S. Industries

All of the national three-digit NAICS industries were grouped into three categories based on average annual growth rates.

U.S. “Fast Growing” Industries

NAICS	Industry Description	U.S. Avg Ann Gr 80-02	NAICS	Industry Description	U.S. Avg Ann Gr 80-02
518	Internet Svc Providers, Data Processing Svcs	6.04	713	Amusement, Gambling, & Recreation	3.25
561	Administrative & Support Svcs	5.70	512	Motion Picture & Sound Recording	3.24
712	Museums, Historical Sites	5.04	481	Air Transportation	3.07
523	Securities, Commod Contracts, Other Fncl Invest	5.03	811	Repair & Maintenance	2.95
624	Social Assistance	4.81	442	Furniture & Home Furnishings Stores	2.94
541	Prof, Scientific, & Tech Svcs	4.27	492	Couriers & Messengers	2.87
532	Rental & Leasing Svcs	4.17	238	Specialty Trade Contractors	2.76
516	Internet Publishing & Broadcasting	3.90	485	Transit & Ground Passenger Trans	2.67
533	Lessors of Nonfinancial Intangible Assets	3.85	722	Food Svcs & Drinking Places	2.60
519	Other Information Svcs	3.71	443	Electronics & Appliance Stores	2.54
623	Nursing & Residential Care Facilities	3.71	813	Religious, Grantmaking, Civic, Prof Orgs	2.39
611	Educational Svcs	3.69	721	Accommodation	2.38
711	Performing Arts & Spectator Sports	3.39	451	Sporting Goods, Book & Music Stores	2.36
622	Hospitals	3.27	812	Personal & Laundry Svcs	2.27
621	Ambulatory Health Care Svcs	3.26			

U.S. “Average Growing” Industries

NAICS	Industry Description	U.S. Avg Ann Gr 80-02	NAICS	Industry Description	U.S. Avg Ann Gr 80-02
444	Building & Garden Equip & Supplies Dealers	2.27	452	General Merchandise Stores	1.15
454	Nonstore Retailers	2.25	448	Clothing & Clothing Accessories	1.10
484	Truck Transportation	2.25	425	Whole Elec Markets & Agents & Brokers	1.06
525	Funds, Trusts, & Other Financial Vehicles	2.19	423	Merchant Whole, Durable Goods	1.01
446	Health & Personal Care Stores	2.17	236	Construction of Buildings	1.00
531	Real Estate	2.11	551	Mgmt of Companies & Enterprises	0.96
453	Miscellaneous Store Retailers	2.08	326	Plastics & Rubber Products Mfg	0.82
493	Warehousing & Storage	1.72	562	Waste Mgmt & Remediation Svcs	0.82
447	Gasoline Stations	1.67	517	Telecommunications	0.78
441	Motor Vehicle & Parts Dealers	1.66	515	Broadcasting (except Internet)	0.78
445	Food & Beverage Stores	1.63	521	Monetary Authorities - Central Bank	0.51
511	Publishing (exc Internet)	1.61	337	Furniture & Related Product Mfg	0.43
524	Insurance Carriers	1.59	321	Wood Product Mfg	0.39
522	Credit Intermediation	1.37	487	Scenic & Sightseeing Trans	0.38
424	Merchant Whole, Nondurable Goods	1.15			

U.S. “Slow Growing” Industries

NAICS	Industry Description	U.S. Avg Ann Gr 80-02
237	Heavy & Civil Eng Construction	0.32
323	Printing	0.27
221	Utilities	0.06
311	Food Mfg	0.03
488	Support Activities for Trans	-0.37
325	Chemical Mfg	-0.41
483	Water Trans	-0.48
322	Paper Mfg	-0.48
486	Pipeline Trans	-0.52
327	Nonmetallic Mineral Product Mfg	-0.57
339	Misc Mfg	-0.64
336	Trans Equip Mfg	-0.64
312	Beverage & Tobacco Product Mfg	-0.70
332	Fab Metal Mfg	-0.79

NAICS	Industry Description	U.S. Avg Ann Gr 80-02
334	Computer & Elec Mfg	-1.07
335	Electrical Equip Mfg	-1.16
333	Machinery Mfg	-1.41
324	Petroleum & Coal Mfg	-2.04
211	Oil & Gas Extraction	-2.30
213	Support Activities for Mining	-2.39
331	Primary Metal Mfg	-2.93
313	Textile Mills	-3.01
212	Mining (except Oil & Gas)	-3.23
314	Textile Product Mills	-3.61
482	Rail Trans	-3.77
315	Apparel Mfg	-3.83
316	Leather Mfg	-6.30